DOCUMENT RESUME

ED 100 545 RC 008 235

TITLE	Research Report--Baseline and Experimental Phases, Influences on Occupational Goals of Young People in Three Southern Subcultures. Information Series 1, Southern Regional Research Project S-63.
INSTITUTION	Kentucky Univ., Lexington. Agricultural Experiment Station.; Southern Regional Committee for Family Life.
SPONS AGENCY	Cooperative State Research Service (DOA), Washington, D.C.
REPORT NO	USDA(CSRS)-S-63
PUB DATE	Jun 74
NOTE	338p.
AVAILABLE FROM	Department of Sociology, S-205D Agricultural Science Bldg., North, University of Kentucky, Lexington, Kentucky 40506 (Attention: Dr. A. Lee Coleman)
EDRS PRICE	MF-$0.75 HC-$16.20 PLUS POSTAGE
DESCRIPTORS	Aspiration; Caucasians; Cultural Factors; *Expectation; Family Characteristics; Junior High School Students; Literature Reviews; Longitudinal Studies; *Low Income Groups; Mothers; Negroes; *Occupational Aspiration; *Parental Aspiration; Racial Composition; Residential Patterns; *Rural Population; Urban Population
IDENTIFIERS	*Southern Regional Research Project S 63

ABSTRACT

The educational and occupational aspirations and expectations of 1,412 low-income youths were analyzed and compared to those their parents had for them according to such variables as social, racial, and cultural factors. Youths were from three low-income subcultures (urban Negro, rural Negro, and Appalachian rural white) in the Southeast. The 6-year study consisted of: (1) planning and pretesting, (2) a baseline study of 5th and 6th graders and their mothers, (3) preliminary analysis of baseline data, (4) a followup (before) study of a subsample followed by a series of three lesson-discussions for the mothers on "Helping Your Child Plan for Education and Career", (5) an after interview of mothers, children, and a control sample from the baseline study, (6) an analysis of before and after data, and (7) an experimental program during the children's junior high or mid-adolescent years. Data from the children were obtained by self-administered questionnaires; mothers were interviewed. This report discusses: theoretical and research background, variables and their measures as operationalized in the study, design and methodology, the sample's characteristics, baseline findings, and the experimental phase. A summary and interpretation are also given. (NQ)

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RESEARCH REPORT
BASELINE AND EXPERIMENTAL PHASES

INFLUENCES ON OCCUPATIONAL GOALS OF YOUNG PEOPLE
IN
THREE SOUTHERN SUBCULTURES

INFORMATION SERIES I

SOUTHERN REGIONAL RESEARCH

PROJECT S-63

JUNE 1974

AGRICULTURAL EXPERIMENT STATIONS
OF
ALABAMA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA
SOUTH CAROLINA, TENNESSEE, VIRGINIA
AND
UNITED STATES DEPARTMENT OF AGRICULTURAL
COOPERATING

RC008335

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ACKNOWLEDGEMENTS

This report was prepared by the state members of the Technical Committee for Project S-63 with the assistance of the Administrative Adviser, Cooperative State Research Service Representative, and Consulting Statistician.

In addition to those contributors listed as state members in the introductory pages, acknowledgement is made to the following persons who assisted with this study at various stages during its development: James Barr, James Goodnight, and Frank Verlindon, N. C. S. U. for assistance in preparation of data; Zoe Albert, U. T., for assistance in data analysis and interpretation; and Mary Elizabeth Keister, UNC-G, for assistance in preparation of the final manuscript.

The Technical Committee is deeply indebted to the school administrators, teachers, extension agents, youth, parents, and interviewers in each of the cooperating states who made this study possible. Appreciation is also expressed to personnel in each of the cooperating states and experiment stations who assisted with the publication of this manuscript.

Special acknowledgement must be made to the contribution of Mary Beth Minden, Representative, Cooperative State Research Service. Dr. Minden guided the Technical Committee during the initial planning and data collection phases of this study.

Recognition and acknowledgement must be made of the contributions of the late Dr. Richard H. Klemer. His outstanding and meaningful guidance during the planning, data collection, and experimental phase of this study is reflected throughout the work and reporting of the project. Dr. Klemer, nationally recognized author, counselor and teacher, was Professor and Chairman of Child Development and Family Relations, School of Home Economics, University of North Carolina at Greensboro, and Chairman of the Experimental Phase Subcommittee of S-63 at the time of his death in September, 1972.

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INFORMATION SERIES

Bulletins I and II are the first of an information series by the Southern Regional Research Project S-63. Under the procedure of cooperative publication this bulletin becomes, in effect, a separate publication for each of the cooperating stations and is mailed under the frank and indicia for each of the cooperating stations. Since this bulletin is identical for all the stations, it is suggested that copies be requested from only one source. Requests from outside the cooperating states should be mailed to the Department of Sociology, S-205D Agricultural Science Building, North, University of Kentucky, Lexington, Kentucky, 40506, to the attention of Dr. A. Lee Coleman.

PREFACE

This publication, "Research Report-- Baseline and Experimental Phases," is the first of two technical reports of the Southern Regional Committee for Family Life and presents the committee members' work on Project S-63, "Influences on Occupational Goals of Young People in Three Southern Subcultures." Although the report represents regional accomplishments, various individuals were responsible for specific sections. For that reason a credit line in the form of a footnote appears at the beginning of each chapter. If there are questions or further interest, please contact the author directly.

The second publication, "Program Plans for Group Meetings," Information Series II, prepared in similar format to this publication, includes the materials used in the Experimental Phase of this study. These program plans were used with groups of mothers of seventh and eighth graders in seven southern states. Three groups in the sample were from Appalachian rural white areas, three were from rural Negro areas, and one was from an Urban Negro area. Although the second report does not include the detailed research procedures, enough information in addition to the group meeting plans is included to enable the user to conduct the programs with groups of parents. The "Program Procedures Manual for Group Leaders" provides suggestions and specific directions for setting up the meeting situations, selecting speakers, providing visual materials, conducting the meetings, and evaluating the three programs. Because the complete manual appears in Series II, this publication will include only abbreviated notes in the Appendix.

TABLE OF CONTENTS

Page

DIRECTORS AND COOPERATING STATIONS ... ii

ACKNOWLEDGEMENTS ... ii

SOUTHERN REGIONAL COMMITTEE FOR FAMILY LIFE ... iii

PREFACE ... iv

LIST OF TABLES AND FIGURES ... ix

CHAPTER I. INTRODUCTION ... 1

- Nature of Focus of the Study ... 1
- Background ... 1
- Purpose ... 2
- Study Design and Rationale ... 2
- Research Questions ... 4

CHAPTER II. REVIEW OF LITERATURE AND THEORETICAL PERSPECTIVE ... 7

- The Achievement Theme in the U. S. ... 7
  - Achieved Status and Perceptions of Stratification ... 7
  - Pervasiveness of High Aspirations ... 8
  - Structural Inequality and Mobility Orientations ... 8
- Cultural Values: The Basis of Aspirations ... 9
  - The Idealistic Nature of Aspirations ... 10
  - Concepts in Perspective ... 10
- Socialization: A Social Context of Status Projection ... 13
  - Social Stratification and Status Projections ... 13
  - Family Influence of Status Projections ... 15
    - Family Structure ... 15
    - Parental Influence ... 16
- Socialization: A Personal Context of Status Projections ... 17
  - Self-Concept ... 18
  - Social Interaction and Self-Concept ... 19
  - Self-concept of the Disadvantaged ... 20
  - Achievement Motivation ... 21
  - Social Interaction and Achievement Motivation ... 22
  - Achievement Motivation of the Disadvantaged ... 23
  - Self-concepts, Aspirations, and Achievement ... 24
- Summary and Hypothetical Model ... 25
- References ... 26

Page
CHAPTER III. SELECTION OF SAMPLE AND DESCRIPTION OF SURVEY CASES 39
Status Characteristics of the Household 40
Family Composition 42
Education of Parents 42
Employment and Source(s) of Income 43
Social Participation and Communication of Mothers and Children 45

CHAPTER IV. DESCRIPTION OF INSTRUMENTS 49
Intelligence Quotient 49
Academic and Achievement Motivation 50
Child's Perception of Mother's Degree of Communication and Independence 51
Bronfenbrenner Parent Behavior Questionnaire 54
Self-Concept Scale 55
Mother's Anomia 56
Mother's Achievement Value Orientation 56
Characteristics Mothers Value in Children 57
Pretesting Research Materials 58
References (listed with each section)

CHAPTER V. METHODOLOGY FOR THE BASELINE SURVEY 59
Inferring Dynamical Laws from Cross Sectional Data 59
Inferring to the Population from the Sample 60
Inferring Results of Precise Measurements by Using Data from Imprecise Ones 62
Validity and Reliability of the Variables 63
Regression Calculation Technology 83
References 86

CHAPTER VI. FINDINGS FOR THE BASELINE STUDY ....

Paper 1. Influences on the Child's Occupational and Educational Status Projections 87
Introduction 87
Procedure 88
Occupational Status Projections 90
Educational Status Projections 94
Discussion 97
Conclusions 101
References 102
Paper 2. Mothers' Attitudes and their Aspirations for their Children 105
Mother-Child Agreement on Status Projections for the Child 106
Education-Occupation Agreement for Children and for Mothers 108
Mothers' Aspirations - Expectations for their Children's Education and Occupation 109
Mothers' Attitudes and Achievement Values 113
Status Characteristics of the Mother and the Household 115
Summary 116
References 117

Page

Paper 3. Influences on Child's Academic Motivation, Self-concept, and Designation of Parents as Significant Others 119
  Academic Motivation 119
  Self-Concept 121
  Significant Other Influence 122
  References 124
Paper 4. Child's IQ, Firstborn Variable, Child's Perception of Mother's Behavior, Mother's Values for her Child, and their Relationships with other Variables 125
  Introduction 125
  Children's IQ Scores and Relationships with Other Variables 126
  Relationships of Firstborn Variable with Other Variables 132
  Relationships of Maternal Behavior Variables with Other Variables 133
  Characteristics Which Mothers Value in Children 137
  Summary 139
  References 140
Paper 5. Status Characteristics of the Mother and the Household as they Affect other Variables 141
  Family Background 141
  Household Size 143
  Mother's Age 143
  Being on Welfare 145
  No Husband 146
  Summary 147
  References 148

CHAPTER VII. EXPERIMENTAL PHASE -- INTRODUCTION & JUSTIFICATION 149
  Justification of the Experimental Phase 149
  References 152

CHAPTER VIII. REVIEW OF LITERATURE 153

  Characteristics of Persons Reached by Parent Education Programs 154
  Methods Used in Parent Education 156
  Evaluation of Parent Education Programs 157
  References 159

CHAPTER IX. METHODS AND PROCEDURES 161

  Selection of Experimental and Control Groups 162
  Data Collection 163
  Interviewers 167
  Group Meetings for Mothers 168
    Program Outlines 168
    Group Leaders 169
    Selection of Participating Speakers 171
  Implementation of Experimental Phase 171
  Reference 180

Page

CHAPTER X. FINDINGS FOR THE EXPERIMENTAL PHASE 181

Change in Responses Measuring Information, Aspirations, and Attitudes 181
  Information on educational and occupational facts 181
  Assessment of information gain 181
  Aspirations for education and occupations 185
    Child's level of occupational aspiration 186
    Mother's level of occupational aspiration for child 186
  Academic Motivation 186
Intervention Program for Mothers 187
  Identification of Child's Unique Interests and Abilities 188
  Understanding Changes in a Child's Interests as a Development Process 189
  Awareness of World of Work and Relation Between School and Work 189
  Relationship Between Interests and Abilities and Occupations 190
  Guiding Children's Career Planning 190
Evaluation of Program Effectiveness 192
  Observers' Reports of Interaction 192
  Evaluation of all Three Programs 193
  Evaluation of Group Meetings 193
    Mothers' Evaluation Sheets 193
    General Observations 195
    Researchers' Observations and Recommendations 196
Summary and Implications 199
References 197, 201

CHAPTER XI. SUMMARY AND CONCLUSIONS 203

APPENDIXES

Appendix A. Student Survey Form -- Baseline Questionnaire and Experimental Phase Before and After Tests 215
Appendix B. Mother Survey Form -- Baseline Questionnaire and Experimental Phase Before and After Tests 237
Appendix C. Summary Information on Variables -- Baseline Phase. Summary Information on Difference Variables -- Experimental Phase 255
Appendix D. Research Procedures Manual for Baseline Phase 265
Appendix E. Interviewing Procedures Manual for Baseline Phase 275
Appendix F. Research Procedures Manual for Experimental Phase 291
Appendix G. Interviewing Procedures Manual for Experimental Phase 304
Appendix H. Regression Coefficients 313
Appendix I. Tests of Homogeneity of Regression Coefficients 323
Appendix J. Programs Procedures Manual for Group Meetings 327
Appendix K. Mothers' Evaluations of Group Meetings 329
Appendix L. Commentary on Occupational and Educational Status Projections and Deflection 333

LIST OF TABLES

Table Page

1. Subculture and State Distribution of Baseline Subjects 39

2. Age of Children by Subculture 40

3. Partial Correlations Between Status Characteristics Variables, by Subculture and Sex 41

4. Family Composition by Subculture 42

5. Years of Schooling for Mothers by Subculture 43

6. Years of Schooling for Fathers by Subculture 43

7. Employment Status of Fathers by Subculture 44

8. Employment Status of Mothers by Subculture 44

9. Main Source of Families' Income as Reported by the Mothers 45

10. Church Participation of Mothers by Subculture 46

11. Voter Registration and Voting Record by Subculture 46

12. Extent of Children's TV Viewing as Reported by their Mothers by Subculture 47

13. Extent of Mothers' TV Viewing by Subculture 47

14. Acronyms and Brief Description of the Twenty-Three Study Variables 64

15. Subculture by Sex Means for Study Variables 66

16. Experimental and Control Mother-Child Pairs by Subculture and State 164

17. Age, Sex, and Grade Level of Experimental and Control Children 165

18. Description of Group Leaders and Assistant Group Leaders 170

19. General Guidelines and State Practices for Payment for Participants 175

20. Record of Meeting Participation 180

21. Mothers' and Children's Scores on Job Information Items Before and After Experiment for Experimental and Control Groups with Number and Percentages of Increases or Decreases of Mothers' and Children's Scores by Subculture 183

22. Differences Between Before and After Tests by Frequencies of MINFD Scores for Control and Experimental Groups of Mothers of Boys and Girls 184

23. Differences Between Before and After Tests by Frequencies of CINFD Scores for Control and Experimental Groups of Boys and Girls 185

24. Means by Subculture and Experiment for Mothers' Aspired Minus Expected Occupation Scores for the Children on the After Test Minus the Before Test 187

25. Chi Square Table for Academic Motivation (ACD) of Girls and Boys by Experimental and Control Groups 188

26. Chi Square Table for Mother Talking with Child about Jobs (MBD) by Experimental and Control Groups by Sex 191

27. Chi Square Table for Mother Talking with Child about Jobs (MBD) by Experimental and Control Groups 191

28. Chi Square Table for Child's Job Thought (JBD) for Experimental and Control Groups by Sex 192

TABLES WITHIN SEPARATE PAPERS REPORTING RESULTS

Paper/Table Page

1.1 Influence of Independent Variables on Boy's Occupational Status Projection (OCC): Standardized Regression Coefficients in Hundredths 89

1.2 Influence of Independent Variables on Girl's Occupational Status Projection (OCC): Standardized Regression Coefficients in Hundredths 90

1.3 Summary of Tests of Elaboration of the Influence of Independent Variables on Child's Occupational Status Projection (OSS) by Type of Effects 91

1.4 Standardized Partial Regression Coefficients for the Regression of Child's Occupational Status Projection (OCC) on Independent Variables by Subgroup and Sex: Coefficients in Hundredths 95

1.5. Influence of Independent Variables on Boy's Educational Status Projections (ED): Standardized Regression Coefficients in Hundredths 96

1.6 Influence of Independent Variables on Girl's Educational Status Projections (ED): Standardized Regression Coefficients in Hundredths 97

1.7 Summary of Tests of Elaboration of the Influence of Independent Variables on Child's Educational Status Projection (ED) by Type of Effects 98

1.8 Standardized Partial Regression Coefficients for the Regression of Child's Educational Status Projection (ED) on Independent Variables by Subgrouping and Sex: Coefficients in Hundredths 99

2.1 Influence of Mothers' Aspirations-Expectations for Their Children on the Children's Aspirations-Expectations by Subculture and Sex: Standardized Regression Coefficients in Hundredths 107

2.2 Additional Percent of Variance in OCC and ED Explained by MOC and MED Combined: Additional Percent of Regression Sum of Squares from All 19 Variables Due to MOC and MED for OCC and ED .. 107

2.3 Partial Correlations Between MOC and MED and OCC and ED After Adjusting for All Preceding Variables in the Causal Chain, and After Adjusting for Schools Only, Compared to Zero-Order Correlations 108

2.4 Percentage Naming Specific Jobs as Aspired and Expected by Mothers of Boys and Mothers of Girls 109

2.5 Dependence of the Mothers' Occupational Status Projections for Their Children on Other Variables: Standardized Partial Regression Coefficients, in Hundredths 110

2.6 Dependence of the Mothers' Educational Status Projections for Their Children on Other Variables: Standardized Partial Regression Coefficients in Hundredths 111

2.7 Partial Correlations Between FBK, ANO, and ACV After Adjusting for All Antecedent Variables in the Causal Chain 113

2.8 Influence of Mothers' Anomia Scores on Other Variables: Standardized Partial Regression Coefficients in Hundredths 114

2.9 Influence of Mothers' Achievement Values on Other Variables: Standardized Partial Regression Coefficients, in Hundredths, Showing the Effects of ACV on Sixteen Variables Subsequent to it in the Causal Chain 115

2.10 Dependence of the Mothers' Anomia and Achievement Value Scores on Status Characteristics of the Mother and the Household: Standardized Partial Regression Coefficients, in Hundredths, Showing the Effects on ANO and ACM of Four Variables Antecedent to ANO and ACM in the Causal Chain, by Subculture and Sex 116

3.1 Dependence of Child's Academic Motivation (AC) on Independent Variables by Sub-Group and Sex: Standardized Partial Regression Coefficients in Hundredths 120

3.2 Dependence of Child's Self-Concept (SEL) on Independent Variables by Sub-Grouping and Sex: Standardized Partial Regression Coefficients in Hundredths 122

3.3 Dependence of Child's Reporting Father as Significant Other (FATK) on Independent Variables by Sub-Group and Sex: Standardized Partial Regression Coefficients in Hundredths 123

3.4 Dependence of Child's Reporting Mother as Significant Other (MOTK) on Dependent Variables by Sub-Group and Sex: Standardized Partial Regression Coefficients in Hundredths 123

4.1 Influence of Child's IQ on Fourteen Other Variables: Standardized Partial Regression Coefficients in Hundredths 127

4.2 Partial Correlation Coefficients (adjusted) for Variables Measuring Child's Perception of Mother's Behavior 129

4.3 Dependence of IQ on Seven Variables: Standardized Partial Regression Coefficients in Hundredths 131

4.4 Influence of FST on Fourteen Other Variables: Standardized Partial Regression Coefficients in Hundredths 132

4.5 Dependence of FST on Seven Other Variables: Standardized Partial Regression Coefficients in Hundredths 133

4.6 Influence of Loving, Demanding, Punishing and Communication Variables on Eight Variables: Standardized Partial Regression Coefficients in Hundredths 134

4.7 Percent of Total Regression Sum of Squares for SEL and AC Due to LV, DM, PU, and COM 135

4.8 Dependence of Communication, Punishing, Demanding, and Loving on Eleven Other Variables: Standardized Partial Regression Coefficients in Hundredths 136

4.9 Influence of Mother's Values on Twelve Other Variables: Standardized Partial Regression Coefficients in Hundredths 138

4.10 Dependence of Mother's Values for Child on Nine Other Variables: Standardized Partial Regression Coefficients in Hundredths 139

5.1 Influence of Family Background on Other Variables: Standardized Partial Regression Coefficients, in Hundredths, Showing Effects of FBK on All Variables Subsequent to it in the Causal Chain, by Subculture and Sex 142

5.2 Influence of Household Size on Other Variables: Standardized Partial Regression Coefficients, in Hundredths, Showing the Effects of HOZ on All Variables Subsequent to it in the Causal Chain, by Subculture and Sex 144

5.3 Influence of Mother's Age on Other Variables: Standardized Partial Regression Coefficients, in Hundredths, Showing the Effects of MOG and All Variables Subsequent to it in the Causal Chain, by Subculture and Sex 145

5.4 Influence of Being on Welfare or Other Variables: Standardized Partial Regression Coefficients, in Hundredths, Showing the Effects of WEL on All Variables Subsequent to it in the Causal Chain, by Subculture and Sex 146

5.5 Influence of Mother's Not Having a Husband on Other Variables: Standardized Partial Regression Coefficients, in Hundredths Showing the Effects of NOH on All Variables Subsequent to it in the Causal Chain, by Subculture and Sex 147

LIST OF APPENDIX TABLES

Appendix Table Page

1. Summary Information on Variables for Baseline and Experimental Phases and Summary Information on Difference Variables for the Experimental Phase 257

2. Regression Coefficients 314
   - Table 2 A. ALL BOYS. Full Adjusted, Standardized Partial Regression Coefficients (in hundredths) Below Diagonal, and Basic Adjusted Partial Correlation Coefficients Above Diagonal and in Blocks Along Diagonal 314
   - Table 2 B. ALL GIRLS. Full Adjusted, Standardized Partial Regression Coefficients (in hundredths) Below Diagonal, and Basic Adjusted Partial Correlation Coefficients Above Diagonal and in Blocks Along Diagonal 315
   - Table 2 C. URBAN BLACKS. Full Adjusted Standardized Partial Regression Coefficients Off Diagonal and Partial Correlation Coefficients in Blocks on Diagonal with Data for Boys Above the Diagonal and Those for Girls Below 316
   - Table 2 D. RURAL BLACKS. Full Adjusted Standardized Partial Regression Coefficients Off Diagonal and Partial Correlation Coefficients in Blocks on Diagonal with Data for Boys Above the Diagonal and Those for Girls Below 317
   - Table 2 E. RURAL WHITES. Full Adjusted Standardized Partial Regression Coefficients Off Diagonal and Partial Correlation Coefficients in Blocks on Diagonal with Data for Boys Above the Diagonal and Those for Girls Below 318

Table 2 F. ENTIRE SAMPLE. Schools Adjusted Partial Correlation Coefficients (in hundredths) with Girls Data Below the Diagonal and Boys Data Shown Above 319

Table 2 G. URBAN BLACKS. Schools Adjusted Partial Correlation Coefficients (in hundredths) with Girls Data Below the Diagonal and Boys Data Shown Above 320

Table 2 H. RURAL BLACKS. Schools Adjusted Partial Correlation Coefficients (in hundredths) with Girls Data Below the Diagonal and Boys Data Shown Above 321

Table 2 I. RURAL WHITES. Schools Adjusted Partial Correlation Coefficients (in hundredths) with Girls Data Below the Diagonal and Boys Data Shown Above 322

3. Tests of Homogeneity of Subculture Regression Coefficients (Significant Results Only): Standardized Partial Regression Coefficients in Hundredths 326

4. Percentage of Study Children Naming Occupations as Aspired and Expected by Nine Census Categories of Occupations 335

5. Percentage of Study Children in Three Subgroups Naming Levels of Education as Aspired and Expected 336

6. Percentage of Study Children Naming Specific Jobs as Aspired and Expected 336

LIST OF FIGURES

Figure Page

1. Occupational Prestige Score Distributions From (a) 1960 U. S. Family Heads, (b) S-63 Boys and (c) S-63 Girls 70

2. Distributions of Educational Scores for Children Compared to Attained Levels of Education in U. S. Population of 25 Years or Older in 1960 and 1970 71

3. Distributions of Level of Aspired Education by the Southern Study Populations of Youth 72

4. Spike Distribution of Mother's Communication to Child Scores 75

5. Spike Distribution of Mother's Achievement Values Scores 75

6. Spike Distribution of Child's Academic Liking Scores 76

7. Histogram of Child's Self-Esteem Scores 76

8. Histogram of Otis-Lennon IQ Scores for the Study Children 77

9. Spike Distribution of OUT and CHA Scores 79

10. Histogram of the Family Background Scores by Subculture 80

11. Spike Diagrams of FATK and MOTK Distributions for Boys and Girls 81

12. Spike Distributions of Household Size for Study Children 82

13. Histogram of Mother's Age Distribution 82

CHAPTER I

INFLUENCES ON OCCUPATIONAL GOALS OF YOUNG PEOPLE IN THREE SOUTHERN SUBCULTURES

INTRODUCTION

Nature and Focus of the Study

Equal opportunity is a vaunted American ideal. However, there is a growing realization that opportunity or "life chances" are not equal for all Americans, particularly low-income people, minority groups, and the people living in certain geographic areas as compared to others. If opportunity is to be made more equal, affirmative action must be directed toward these disadvantaged groups, and its impact must be felt particularly among the youth before their career patterns and their personal characteristics are "set."

The research reported in this series of papers addresses itself to this concern, in that it is a study in low-income areas of children's educational and occupational aspirations and expectations as related to their parents' aspirations and expectations for them. These aspirations-expections are analyzed and compared according to various personality, family, socialization, community, racial, residential, and cultural factors. The study is in the tradition of the well-known achievement motivation and career planning research of recent years and is oriented toward intervention techniques for increasing the knowledge of parents and children about careers and helping them to plan more realistically. The long-range objective is to help youth achieve educational and occupational goals that will maximize their life satisfactions and move their communities and areas toward modernization, development, and a higher quality of life.

Background

The present research grew out of the earlier Southern Regional Research Projects, S-48 and S-48 Revised. Though there has been an almost complete turnover of personnel from the first project to the present project, there was nonetheless continuity from year to year in personnel, the states and institutions represented in the study, and the general area of research interest. Yet the present study, initiated in 1967 and concluded in 1973 represents a thrust in several new directions in that children were studied at a considerably younger age and followed over a period of time, the study is restricted to low-income areas and families, subcultures are compared, and an experimental research design is used for part of the study.

The first study, S-48, from which the principal findings were published in 1965 (Bulletin 107, Southern Cooperative Series) was concerned with educational and vocational goals of rural high school youth. It was based on a

* * * * * * * * * * * * *

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stratified sample of 1139 boys and girls and their parents, about equally divided between the Applachian areas of Kentucky, North Carolina, Tennessee, and Virginia. The main focus was on differences and similarities in the goals of the youth and the goals of their parents for them. The S-48 Revised project was a parallel study of the goals of urban youth and involved a stratified sample of 928 youth and their parents in seven states--Alabama, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia. The principal findings of this study were published in 1968 (Bulletin 136, Southern Cooperative Series).

These studies confirmed the findings of other research, in that rural youth--and even urban youth of rural background--were found to have somewhat lower educational and occupational goals, and their parents put less emphasis on education. But, as in other research, class or level of living differences in these respects were more striking--the lower the level of living of the family, the lower the goals of the youth, and the higher the level of living, the higher the goals and the greater the urging and assistance of parents toward high educational and occupational goals.

The analysis of the earlier studies indicated as early as 1967 the need for the present study. The research group wanted to continue building on the foundation laid by the earlier studies but felt that it was time to take some new directions in design and methodology and in the substantive focus of the research. The milieu of the time was one of increased concern about minorities and deprived peoples and areas, increasing emphasis on rural development, and a growing realization that a better opportunity structure for deprived youth was essential if underdeveloped areas and groups were to have a chance of "catching up" economically and socially. Thus it was decided that the next phase of research should focus on low-income youth and their parents and that an experimental research design would be employed to test some procedures for increasing occupational and educational information and its saliency among low-income youth and their parents.

Purpose

On the basis of existing research and general observation it appeared that one general problem of youth career planning was that serious thinking about careers and the education required for them frequently comes too late to influence maximally the youth's preparation for entrance into a particular career track. It was felt that the negative impact of failure to choose a goal and generate motivation to work toward it during early adolescence would be much greater among youth from low-income families and communities who are likely to become high school dropouts if they are not motivated and doing well in school. Boys, in particular, because of the emphasis on sports in the junior high and high school years, seemed likely to profit if the salience of academic pursuits could be increased at this time. For these reasons the committee planned the experimental program for the junior high years.

Study Design and Rationale

The achievement motivation literature has focused on values, child-rearing practices, and the child's self-concept as important variables. Since these are culturally based and since there is evidence of subcultural differences in them as between social classes, race or ethnic groups, and people living in rural and in urban areas, it was thought appropriate to conceive of several "low-income subcultures" from which the sample would be drawn, namely rural Negro, urban Negro, and rural white Appalachian. These "subcultures" were the principal large "poverty groups" in the states involved. It was realized that they only partly met the criteria of a subculture, but it seemed desirable to select samples that would be as homogeneous as possible, economically and culturally, so that the relationship of other variables to achievement motivation within each group could be assessed and some of the independent variables manipulated experimentally. Thus "subculture" or race and residence may be considered control variables. The school was taken as the basic sampling unit and the search was for schools with homogeneously low-income clientele that was all-rural or all-urban (cities of 50,000 or more), all or mostly black or white, and, in the case of rural white, in the Appalachian area. At the time the first interviewing was done the schools in the areas studied were still largely segregated by race.

Research has shown repeatedly that youth attribute more influence and communication on careers and education to their mothers than to their fathers. This is in conformity with what appears to be a rather pervasive norm in our society, that discussing and helping the child with such matters is more nearly the mother's role than the father's, as are also child-rearing and training in general. This, plus another important fact about the particular groups to be studied, led to the decision to operationally define "parents" as "mother"--that is, to obtain data directly from mothers and children only. The second determining consideration was the knowledge that in low-income families there are many father-absent units, but very few family units having school-age children but no mother or mother-substitute; in other words, the mother-child unit is the near universal one, particularly among low-income Negroes.

The study was carried out over a six-year period. The first year was devoted to planning and pretesting. In the second year a baseline study of fifth and sixth grade children and their mothers was completed. Preliminary analysis of the baseline data was done in the third year. In the fourth year a follow-up (before) study of a sub-sample of the same children and their mothers was carried out followed immediately by a series of three lesson-discussions for the mothers on "Helping Your Child Plan for Education and Career." The group meetings were followed three weeks later by another (after) interview of these mothers and children and a control sample from the same baseline study. During the fifth and sixth years analysis of the before and after data and the write-up and reporting of the findings were accomplished. At each stage the data from the children were obtained by self-administered questionnaires answered in the classroom with close researcher supervision, whereas the mothers were personally interviewed, usually in the home.

The design and time schedule were such that the experimental program came during the children's junior high or mid-adolescent years. This also had the advantage that the first data were obtained from the children while they were still in elementary school, an age-level at which very little career-planning and aspiration research has been done. (Most studies have been of high school youth.) It was desired to take the baseline observations as early as possible, but the committee felt that the fifth and sixth grades were about as early as a self-administered questionnaire was feasible--as well, perhaps, as being the earliest point at which any appreciable career thinking by children would be found. Since children from low-income families are often somewhat behind grade-level and/or deficient in verbal skills, the questionnaire was almost entirely of the checklist type and the researcher read all questions aloud with the children.

The decision to carry out the experimental program with the mothers rather than directly with the children derived from several considerations. First, the schools have a responsibility--however inadequately carried out in many places--to provide instruction and counseling on occupations and careers. Yet family, community, and peer group influences together are known to be more influential than school programs. Thus the "natural," already established mother-child channel of communication and influence might be utilized for career information and stimulation to supplement and/or make up for the gaps in school programs. Previous research suggested that group sessions with mothers might also be more effective in achieving and implementing commitment to discuss careers with children than would working on mothers individually. Moreover, most of the researchers were associated with departments and/or colleges that already had a mission of working with women in Home Economics Extension Service family life education programs.

Research Questions

The overall research question guiding the present study may be stated as "What are the level and nature of ambition and motivation to achieve among youth in these low-income subcultures, what factors are related to varying degrees of ambition, and to what extent may children's career thinking and planning be influenced by group sessions with their mothers?" More specific sub-questions with which the study is concerned include the following:

1. How high are the occupational and educational aspirations and expectations (status projections) of elementary and junior high school children in low-income groups, and how do the subcultures compare?

2. How do the aspirations and expectations of the children compare with the desires of their mothers for them?

3. How closely related are levels of educational status projections with occupational projections?

4. How are the mother's values related to the child's aspirations?

5. How are the mother's child-rearing practices and ideals related to the child's aspirations?

6. What differences are there between boys' and girls' aspirations, their mothers' aspirations for them, and the relation of other factors to aspirations among boys and among girls?

7. How are family characteristics related to the child's aspirations?

8. How is IQ as measured by standard tests related to aspirations?

9. How are the child's self-concept, his academic interest and motivation, and his general desire to achieve related to his educational and occupational aspirations?

10. Can the mothers' information, attitudes, and aspirations concerning careers for their children be changed in desirable directions by group lesson-discussions on the subject?

11. Can the child's information, attitudes and planning be measurably influenced by such sessions with the mothers?

12. Are such sessions sufficiently acceptable to mothers that they can be practical and efficient in helping the mothers and children explore career opportunities?

In the papers which follow, the theoretical and research background for these research questions is discussed in more detail, the variables and their measures as operationalized in the study are presented, the design and methodology are further detailed, and the characteristics of the sample are described. Then the findings of the baseline study are presented, the experimental phase of the study is described in greater detail and the data presented, and an overall summary and interpretation are given.

Southern Cooperative Series. Educational and Vocational goals of rural youth in the South. Raleigh: North Carolina Agricultural Experiment Station, 1965, Technical Bulletin 107.

Southern Cooperative Series. Educational and Vocational goals of urban youth in the South. Raleigh: North Carolina Agricultural Experiment Station, 1968, Technical Bulletin 136.

CHAPTER II

REVIEW OF LITERATURE
AND
THEORETICAL PERSPECTIVE

The Achievement Theme in the United States

In a treatment of the major value orientations in America, Robin Williams (1970) states that, "first, American Culture is marked by a central stress upon personal achievement, especially secular occupational achievement" [p. 454]. This achievement ideology or mobility ethos has been recognized as one of the most important aspects of contemporary social stratification because it reflects a dynamic quality of society in subjective mobility orientations and potentials for mobility (Hodges, 1964; Lipset and Bendix, 1966; Westoff, et al., 1960). One such subjective mobility orientation is the expressed desire for and anticipation of future attainment of selected components of social status. This facet of mobility orientation, the subjective educational and occupational projections of youth, is the major concern in this study.

Achieved Status and Perceptions of Stratification

Achieved status is the mechanism by which the United States has come to be recognized as the contemporary industrialized society with the most "open" stratification structure -- a structure within which persons of lowest social origins can rise while at the same time persons of higher social origins can fall (Miller, 1960). American achievement ideology is oriented in this direction as Simmons and Rosenberg (1971) state:

> In contrast to other attitudes concerning the stratification system which seem to be learned in the absence of explicit instruction, the doctrine of the "American Dream" is a matter of formal learning. In school children are taught that all men are created equal, that everyone has an equal chance to get ahead, that opportunity is open to all with the talent and ability to grasp it [p. 239].

This implies that the fluidity or openness of the social stratification system in the United States may be seen in terms of beliefs and identification as well as actual rates of mobility.

Important for this study is children's awareness of occupational prestige, their perception of the opportunity structure, and their social class self-identification. A recent study of black and white children from grades three through twelve reveals that as early as elementary school: (1) children rate occupations in an order almost identical to that of adults; (2) although children do not accept the doctrine of equality of opportunity for all, a majority of every age, race, and socioeconomic level are optimistic about their own personal

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opportunity; and (3) children, like adults, tend to select the middle class as their social locale (Simmons and Rosenberg, 1971).

Pervasiveness of High Aspirations

Upward mobility orientations of Americans are perhaps most significantly revealed by the pattern of occupational aspirations in which upper occupational categories are generally valued and aspired to regardless of the social class, age, sex, residence, or ethnicity of the aspirant (Antonovsky and Lerner, 1959; Empy, 1956; Gist and Bennett, 1963; Hamilton, 1964; Stephenson, 1957). The tendency to report high levels of occupational aspiration persists regardless of obvious impediments such as low socioeconomic status and disadvantaged ethnic status. Moreover, there is some evidence that blacks tend to report higher levels of occupational aspiration than do whites at comparable status levels (Antonovsky, 1967; Antonovsky and Lerner, 1959; Dreger and Miller, 1968; Gray, 1944; Reiss and Rhodes, 1959).

The educational aspirations of disadvantaged Americans also tend to be very high, specifically, college oriented. Contrary to Ginzberg's et al. (1951) contention that children from lower income families are less likely to think of attending college than children from higher income families, recent research indicates that educational aspirations do not appear to be associated with socioeconomic status or level of academic achievement (Brookover, Erickson, and Joiner, 1967; Holloway and Berreman, 1959; Weiner and Murray, 1963). And again, several studies have reported higher levels of educational aspiration for blacks than for whites at comparable status levels (Ohlendorf and Kuvlesky, 1968; Pelham, 1969; Rosen, 1959; Weinberg, 1970). Likewise the educational aspirations and expectations of rural youth are very high (Slocum, 1968).

Thus, upward social mobility is one of the primary value orientations throughout American society, and it is generally accepted that occupational and educational achievement is the most common means to upward social mobility (Chinoy, 1955; Westoff et al., 1960).

Structural Inequality and Mobility Orientations

Although there is clear evidence to indicate that upward social mobility is a value orientation widely held by Americans of various social strata and ethnic backgrounds, there exists a discrepancy between aspirations and the objective reality of attainment. For example, Blau and Duncan in The American Occupational Structure (1967) point out that low socioeconomic origin, rural origin, Southern origin, and especially black racial status, constitute severe impediments to upward intergenerational mobility. Their work reveals that the occupational mobility potential and the attainment of occupational status are inferior for blacks even when educational and economic factors are held constant. Furthermore, the discrepancy between the occupational status of blacks and whites increases with movement up comparative educational categories (Blau and Duncan, 1967, pp. 219-226, 237-239). Therefore, although occupational status has been regarded as a function of the extent to which an individual desires to achieve (Kahl, 1957) reality strongly contradicts this assumption. In other words, while aspiration is less related to social class or race than previously believed, the limited achievements of the disadvantaged are primarily the result of limited opportunities, not limited aspirations.

Although the life chances of blacks are inferior to ~~that~~ those of whites because of systematic discrimination within the occupational structure, this discrepancy is only part of the problem. In a recent study, Lieberson and Fuguitt (1967) point up that an absence of occupational discrimination against blacks would not eliminate the status discrepancy between blacks and whites because of the disproportionate number of blacks at low educational levels. In conjunction with these structural inequalities, Porter's (1968) contention that future upward mobility will be increasingly accessible to highly qualified professionals, managerial and scientific workers, suggests that the attainment of desired educational and occupational status may become increasingly problematic for the disadvantaged in general. More specifically, rural youth may encounter increasing difficulty because of an emerging "rural" factor that is increasingly becoming linked with poverty, as suggested in a recent study (Nelsen and Story, 1969) which indicates "poorer" personality adjustment among rural youth than for town and city youth.

Coupled with the structural barriers to achievement is the question of whether the motivational factors of disadvantaged Americans are conducive to a high degree of mobility striving necessary to overcome structural inequalities. Numerous investigators contend that the value orientations, occupational aspirations, and achievement motivations of the lower social strata, particularly lower strata blacks, are insufficient for mobility striving and mobility attainment (Clark and Wenninger, 1963; Hamilton, 1966; Hyman, 1966; Porter, 1968; Rehberg, 1967).

Clearly, the attainment of desired educational and occupational levels is problematic for persons of lower social origins. However, a greater understanding of the process by which mobility values and aspirations are developed and internalized is necessary in order to assess the extent to which failure to attain desired success goals is attributable to the socialization process in conjunction with structural barriers.

Cultural Values: The Basis of Aspiration

The major assumption operative throughout this paper is that aspirations, with regard to projected status attainment, reflect generalized cultural values. Educational and occupational status projections are conceived of as indicators from which success and achievement values may be inferred. The position taken here is that educational and occupational aspirations and expectations, as measured in this and most status projection studies, are more appropriately conceptualized as cultural rather than personal phenomena (see Yinger, 1965). As cultural phenomena, status projections are indicators of the extent to which culturally valued goals are subscribed to by individuals (Merton, 1968).

The Idealistic Nature of Aspirations

Many studies of the educational and occupational aspirations of young people have contended that the "success goals" are highly "unrealistic" in view of the slim possibility of actual attainment (Coleman, 1966; Cosby and Picou, 1971; Lott and Lott, 1963; Meyers, 1947; Super, 1961; Trow, 1941). For example, Dale (1948) asserts that if youth in a metropolitan area became the sole inhabitants of the city, in the occupation of their choice, a vastly disproportionate number of professionals would result whereas most service occupations would be left vacant.

The unrealistic conception of aspirations is also conveyed in the developmental theories of occupational choice of Ginzberg, et al., (1951) and Super (1953). Occupational choice is seen by them as a process which is largely irreversible and involves compromise. This process by which the decision is eventually formulated is conceived as progressing through three specific stages: fantasy, tentative, and realistic. The fantasy period is characterized by young children's occupational projections unrestrained by considerations of individual capacity or range of real opportunity. The tentative period is characteristic of early adolescence. Here, as in the fantasy stage, subjective interests and values provide the impetus for projections, yet "realistic elements" of intellectual maturation begin to come into play in the choice process. Within the realistic period, characteristic of late adolescence, earlier subjective choices are compromised with the objective facts of one's environment (Taylor, 1968).

Within these formulations is the notion that aspirations and expectations become more realistic with age, education, and intellectual maturity. Because of the general lack of longitudinal studies of aspiration, there is little empirical data by which hypotheses concerning the developmental theories may be examined. However, an examination of aggregate profiles of youth of different ages or profiles of the same youth at different time periods during adolescence shows little variation.

> The recent findings would indicate that youth do not become more realistic in their aspirations and expectations through high school; conversely, many of them become less realistic (Kuvlesky, 1969).

This is illustrated by a recent test of Ginsberg's developmental theory in a study of rural black and white Texas high school youth (Cosby, *et al.*, 1972). Changes in their level of occupational expectation were found to be about equally divided between students with an increase (43 percent) and students whose expectations decreased (38 percent).

The lack of confirmation of developmental theories by survey methods can be partially understood when the "narrowness" of occupational aspirations is considered. One of the most definitive characteristics of the occupational structure in our society is the conspicuous absence of appropriate mechanisms of communicating occupational knowledge. Therefore, the entire array of some twenty thousand occupations are not systematically aspired to, but perhaps a dozen or less are typically aspired to, or put another way, "freedom to choose in a structure of ignorance is considerably less than real freedom" [Taylor, 1968, p. 189]. Similarly, Slocum (1966) asserts that "young people in our society do not have very realistic perceptions of either the world of work or their own eventual occupational potential," [p. 186]. Most recently, Haystead (1971) points up the fact that the process of occupational choice, in terms of entering one's first job, is not contingent upon the individual's "awareness" of the job. Moreover, the investigator indicates that teachers' and peers' influence contributes little to students' occupational awareness.

Thus, in the absence of realistic or objective bases for occupational aspirations, coupled with perception of the occupational prestige hierarchy, cultural values regarding occupational goals provide the context of aspirations. That is to say, in this perspective, the high success goals of young people are not unrealistic personalized goal-commitments, but rather "idealistic" or cultural goals given individual expression.

Concepts in Perspective

From a perspective of aspirations as essentially cultural or idealistic phenomena the concept of aspiration refers to the individual's "ideal" level of future achievement, or a desirable status which transcends structural and personal limitations. The concept "expectation" refers to the individual's anticipated level of achievement, or expected status, which may or may not take into account awareness of structural and personal limitations. Thus, expectation denotes a status that may be perceived as more likely to be attainable than the aspired status, or a deflection from aspiration.

Contrary to studies which have made a distinction between aspirations and expectations in terms of the former being "ideal" and the latter being "real" status projections (Han, 1969; Stephenson, 1957b), the position taken here is that both are basically within the ideal realm of phenomena. Expectation is not to be viewed as a realistic appraisal of future goal attainment, but rather the projected level of goal attainment resulting from the extent to which awareness of limitations deflects the projection from an idealized aspiration. This idea is congruent with Haller's (1968) recent clarification of aspiration in which he points out that expectations are not realistic but are based on significant others' expectations. In other words, whereas aspirations are indicators of the extent of assimilation of cultural values, expectations are indicators of the extent to which cultural values are modified by perception of significant others' expectations (Haller, 1968) or by perception of barriers to the attainment of the most idealized status (Aldrich, 1970).

Support for this conceptualization of expectations as being within the ideal level of abstraction is of three main types. First Haller (1968) argues:

> In all our studies . . . we have found the four indicators of realistic and idealistic levels which together make up the "Occupational Aspiration Scale" (OAS) to be so highly intercorrelated that they are well-described by only one factor -- obviously, level of occupational aspiration [p. 485].

Haller goes further to say that factor analyses of the OAS show it to be heavily saturated with one factor underlying both the idealistic and realistic indicators; that is, both aspirations and expectations.

The second source of support comes from the extent to which expectations deviate from aspirations and the extent to which perception of barriers comes into play in the deviation. Although aspirations are ordinarily higher than expectations, some studies not only report a higher proportion of respondents whose expectations are congruent with their aspirations, but also some individuals, whose expectations actually exceed their aspirations. Lever (1969), in a study of Southern youth, reports that over one-half of each race-sex category anticipate no deflection from their occupational aspirations. In two recent Texas studies, one of black and white youth (Ameen, 1968) and another of Mexican-American youth (Wright, 1968), approximately two-thirds of the respondents' expectations are congruent with their aspirations. Furthermore, in both studies from 8 to 14 percent of the individuals report expectations which were actually higher than aspirations.

The issue of the extent to which students' perceptions of barriers to the realization of aspirations results in lower expectations is, at this time, a relatively unexplored area of study. However, recent research indicates that although barriers to occupational opportunity are generally perceived this is not taken into account in aspirations (Simmons and Rosenberg, 1971) or expectations (Ameen, 1968). For example, in a Mississippi study of black high school juniors and seniors in which 80 percent of the students perceived some barrier, over 91 percent of those aspiring to professional occupations expected to achieve them (Bell, 1969). Even when perception of structural and personal barriers have been shown to have a negative effect on achievement orientations, occupational aspirations, and occupational expectations, high levels of aspiration and expectation still persist (Aldrich, 1970).

The third justification for conceptualizing expectations as within the ideal or cultural level of analysis may be derived from findings regarding intergenerational mobility orientations of young people. Educational and occupational expectations constitute a status projection level that generally far exceeds that of the parents' status. This fact is especially true for youth of lower social origins. Illustrative of this point is Slocum and Empy's (1956) finding that intergenerational mobility orientations of high school senior girls are negatively associated with family socioeconomic status. As Kuvlesky and Pelham (1966) note with regard to this finding, "It can be inferred from this observation that the lower the social rank of the girls the higher was her desire for mobility" [p. 33]. This inverse relationship between social class and intergenerational mobility aims is also demonstrated in a study of black and white students in grades three through twelve (Simmons and Rosenberg, 1971). Similar mobility orientations of minority groups are indicated in Heller's (1967) study of Mexican-American high school students' status projections. Whereas 42 percent have unskilled or semi-skilled occupational origins, only four percent expect unskilled or semi-skilled labor. Likewise, whereas only two percent have semi-professional origins, 35 percent expect to attain semi-professional occupations.

One could hypothesize that because various socioeconomic strata and ethnic origins have similarly high aspirations and expectations, the cultural input is greater for those people of more disadvantaged origins. Whereas middle-class white youth have access to resources and role models that would render low aspirations somewhat inconceivable, lower class black youth lack equal access to such facilitating factors. Hence their high aspirations and expectations may be derived from the pervasiveness of occupational success goals and values which transcend their lack of access to structural, economic, and interpersonal facilitators of mobility orientations.

Socialization: A Social Context of Status Projections

Although values constitute the key component in the content of culture, values of the individual are social in origin. Values are learned in the process of social interaction (Williams, 1970). Socialization, the process by which aspects of culture are imparted to the individual through social interaction, is to be seen both in terms of cultural variations in the social structural setting in which it takes place and in terms of unique behavorial variations in interpersonal relationships.

Of the major socialization agencies contributing to the transference of mobility orientations to the child, the family has been considered primary in influence (Child, Storm, and Veroff, 1958; Kohn, 1969; Krebs, 1958; McClelland, 1961; Rosen, 1962; Rosen and D'Andrade, 1959; Winterbottom, 1958). Familial influence on the child's status aspirations is generally examined by three different but interrelated foci: (1) subcultural variation concomitant with social stratification; (2) the effects of family structure; and (3) the influence of parent-child interaction.

Social Stratification and Status Projections

Numerous studies indicate that in imparting achievement values to the child, the family may reflect social class and ethnic differences (Hyman, 1966; Kahl, 1953; Kohn, 1969; Larsen and Sutker, 1966; Reissman, 1953; Rosen, 1956). This "class differential value" position is given expression in the conclusion that members of the lower social class place less value on formal education and professional occupations and hold values that reduce upward mobility motivation and striving (Hyman, 1966). One author emphatically contends that there is a substantial segment of present-day American society whose way of life, values, and characteristic behavior patterns are the product of a distinctive cultural system which may be termed "lower class" (Miller, 1958).

By contrast, other investigators contend that because of the equalitarian ethos and social stratification in America being defined as "open," high achievement values of all social strata are reflected in aspirations to high prestige occupational categories regardless of the social class, type of residence, or ethnicity of the aspirant (Antonovsky and Lerner, 1959; Empy, 1956; Gist and Bennett, 1963; Hamilton, 1964; Kuvlesky, 1970).

This "common value orientation" has theoretical focus in Merton's (1968) proposition that high level success goals are widely internalized throughout the various social strata of American society. A similar and related hypothesis of Gordon (1961) is that ethnic minorities in our society have become enculturated in terms of the achievement values of the larger society. Profound support for Merton's thesis that success and achievement values are characteristic of all social strata of American society is demonstrated by Hamilton's (1964) study of the behavior and values of skilled workers. He contends that blue-collar workers generally express a desire for white-collar status for themselves and their offspring even when, in many cases, their own incomes exceed those of white-collar workers and they more frequently than white-collar workers own their own homes. Subsequently, the "American Dream" is so strong in our culture that, as Mack and his associates (1956) contend, it will eventually override in influence subcultural and ethnic differences. This contention has received support from the trend in the findings of aspiration studies. A majority of the studies reporting class differentials in level of aspiration were done prior to the decade of the 1960's. However, during this decade the "human rights" movements may have contributed to increasing the pervasiveness of high success goals at every level of American social strata. The influence of the mass media has, without doubt, been instrumental in the process as Pelham (1970) notes:

> That the visibility between the poor and the rest of society was improved perceptibly in that ten-year period is undeniable. The mechanisms of mass media which have made the upper strata aware of those below have in turn, made those at the bottom aware of the "good life" above them. This phenomenon has undoubtedly made the culturally-prescribed goals objects of aspiration to many of the "isolates." A majority of the findings since 1960 support this hypothesis [p. 15].

The cultural change which is explicit in Pelham's observation has received some support in a recent enlightening, generational comparison of anomia and achievement orientations of rural blacks and whites in Florida. The findings indicate no generational differences for the whites, and in contrast to a large generational difference between the black high school senior and their parents. Moreover, the success orientations of both black and white students in the study are comparable (Youmans, et al., 1969).

In view of racial discrimination and social and cultural isolation, it has been suggested that lower strata Negroes have developed life styles that reflect relatively autonomous and cohesive subcultures (Hannerez, 1969). Following this line of reasoning, it has been hypothesized that middle-class whites should be most highly committed to the dominant value system, and lower-class blacks should be the least committeed. However, McCarthy and Yancy (1971) state:

> Though we are led to make this argument on theoretical grounds, we are somewhat sketpical of it on empirical grounds. The research on educational aspirations of black and white youth indicates that black adolescents are at least as likely and probably more likely to accept dominant definitions of educational success [p. 666].

One could argue that racial conflict is, to a large degree, a product of commonly held cultural values regarding achievement and status striving coupled with differential opportunity and life chances. This idea is, in fact, central to Merton's (1969) theory of social structure and anomie.

Previous research has shown a weak but consistent association between low social status and specific value orientations that are conceived as both a consequence of social immobility and a barrier to upward mobility. For example, the concept "anomia" which has been used to describe a personal state of feelings of uncertainty, pessimism about the future, cynicism about the motives of others, and perception of society as rapidly changing (Struening and Richardson, 1965) has been shown to be associated with immobility of the lower social strata (Dean, 1961; Meier and Bell, 1959; Mizruchi, 1963; Simpson and Miller, 1963; Srole, 1956). According to Merton (1968) anomia is the personal manifestation of a discrepancy between internalized cultural goals and structural inaccessibility of institutionalized means for goal attainment. Mizruchi (1963), like Merton, contends that persons of lower social strata hold mobility goals, or at least the consumptory aspect of goals, but do not possess the means to reach these goals. That anomia stems from frustration of aspirations has been indicated by the fact that anomia is related to upward mobility striving that is "perceived as blocked" (Wilensky, 1966) or to expected mobility that does not occur (Germani, 1966). Of considerable importance to this study is the fact that anomia has been related to disjunction between parental educational aspirations for children and perceived opportunity (Rushing, 1971).

Ironically, a point of convergence between the class differential value position and common value position is to be found in the concept of anomia. Because of a "perceived" discrepancy between cultural achievement goals and objective reality of attainment, a lower strata configuration of negative feelings concerning personal mobility chances is developed.

Although there may exist some class differences in values, high occupational prestige values appear to be relatively common for all social strata. The aspirations of all strata reflect idealization of high occupational categories and such differences that have been shown to exist between groupings are typically in degree rather than in kind (Jones, 1968). In other words, the differences in achievement aspirations of individuals from various social strata are only relative rather than absolute (Empy, 1956; Kuvlesky, 1970; Reissman, 1953; Simpson and Simpson, 1962).

Regardless of any differences or similarities in aspiration that comparative research may indicate, one fact is clear -- there is greater variation within comparative types than between comparative types. This is to say, there are greater differences among rural blacks or urban whites than between the averages of the two categories. Hence, the main quest in aspiration research becomes identifying the factors and the processes which account for the respective within-type variations.

Family Influence and Status Projections

Family Structure. The status projections of youth have been examined with regard to their association with a variety of factors related to family structure.

For example, with regard to family size generally a negative relationship has been observed for occupational expectations (Haller, 1960; Nunalee and Drabick, 1965; Youmans, 1956) and for educational expectations (Sperry and Kivett, 1964). Correspondingly, a positive relationship has been demonstrated between only child status and educational expectations (Edlefsen and Crowe, 1960; Lionberger, *et al.*, 1965).

Another aspect of family structure which has received attention, especially among lower-class and Negro families, is the "fatherless family." For example, in a comparative study of the attitudes of mothers in broken and intact families, Parker and Kleiner (1966) indicate that mothers in broken homes have lower goal-striving stress scores and lower educational and occupational aspirations for their sons than have the mothers of intact homes. On the other hand, Kriesberg (1967) contends that among low-income families, the husbandless mothers' educational aspiration for sons are depressed, but absence of the male does not affect the child's academic performance or the mother's participation in school affairs. Furthermore, husbandless mothers were described as very much concerned about their child's educational future and tried to "push hard where they could" to compensate for the consequences of structural incompleteness.

Because of the frequent lack of a father, either structurally or in terms of a success role model, other structural factors become important for the upward mobility of children from lower-class families. Studies have shown that the exposure of lower-class youth to persons of higher social characteristics, whether by way of residence in a heterogeneous neighborhood, attendance at a predominantly middle-class school, or sponsorship by a high status adult, may serve to partially account for the upward mobility orientations of some lower-class youth (Campbell and Alexander, 1965; Cohen, 1965; Ellis and Lane, 1963; Wilson, 1959).

Parental Influence. Within family structure, parental influence has, of course, received considerable attention as a major factor influencing the child's aspirations. Although social class has been indicated, in many cases, to be strongly related to educational goals, research has shown that parental aspirations or parental encouragement for higher education for one's child can override a lower-class background (Bordua, 1960; Ellis and Lane, 1963; Kahl, 1953; Rehberg and Westby, 1967; Strodtbeck, 1958; Sewell and Shah, 1968). Furthermore, several investigators assert that parental aspiration is a more important determinant of children's educational aspirations than is social class membership *per se* (Kahl, 1953; Kandel and Lesser, 1969; Sewell and Shah, 1968). Although several authors contend that peer influence is a stronger determinant of aspirations than is parental influence (Herriott, 1963; McDill and Coleman, 1965), others have argued that the relative influence of parents and peers is not independent but rather that social interactions with peers support the values of the parents (Kandel and Lesser, 1969).

Parental influence has been shown to have a parallel effect upon the child's occupational aspirations. In a study of occupational aspirations of high school students, Simpson (1962) reports that for both middle-class and lower-class boys, parental influence is more strongly related to aspirations than is peer influence. There is some evidence that the relative influence of the mother and father may vary with social class. For example, one study of high school seniors reveals that children of white-collar workers generally considered their fathers the more influential in regard to their educational orientation, whereas children of blue-collar workers rate their mothers as more influential (Lowe, 1963).

Of major importance for this study is the evidence that the mother's influence on the adolescent's aspirations and expectations is greater than that of the father (Kandel and Lesser, 1969; Youmans, 1956). These findings are congruent with the findings of Ellis and Lane's (1963) examination of the structural factors that lead lower-class youth to make use of college as a mobility channel. They conclude that, for lower-class youth, upward mobility is linked to a distinctive pattern of maternal authority within the nuclear family.

The influence of the mother on the adolescent's educational plans appears when examined in the actual context of her interactions with the adolescent about these plans. Kandel and Lesser report that 82 percent of the high school students in their study plan to attend college when the mother strongly encourages the pursuit of higher education, but only 14 percent when the mother reports she has advised against college attendance (1969). Others have reported that mothers aspirations, expectations, and encouragement are strongly related to the child's aspirations and expectations (Bell, 1963; Bordua, 1960; Cohen, 1965; Kahl, 1953; Sewell and Shah, 1968).

Perhaps the effect of parental influence on adolescents' aspirations is best revealed in the fact that when parental encouragement and aspirations for the child were simultaneously controlled, the social-class effects on the child's own plans disappear in Kandel and Lesser's study (1969). Thus, the social class or ethnic differences in youth's aspirations and expectations may be explained by different levels of parental aspiration and encouragement. Although parental attitudes, values, and behavior may be associated with social class position, parent-child interaction constitutes the link between social class and youth's expression of status projections.

A final note of caution should be added concerning the possible exaggeration of the extent to which mobility orientations of the child are transmitted by parental influence. In a recent examination of this problem with working and lower-class parent-child pairs, Furstenberg (1971) concludes: (1) the parental influence on children's ambition is relatively modest; (2) a large number of children do not accurately perceive their parents' aspirations and a lack of parent-child agreement results; (3) when children correctly perceive their parents' aspirations, they are quite likely to share their mobility orientations; and (4) parent-child agreement is contingent upon the quality of parent-child interaction. Although many studies report some degree of intra-family concensus on aspirations, one cannot conclude that children have actually acquired their views directly from parents. Another plausible alternative is that parent-child concensus is not the result of socialization but rather the common factors acting upon family members that leads to independent agreement (Furstenberg, 1971).

Socialization: A Personal Context of Status Projections

As previously indicated, the socialization process is cultural in the content imparted, social in that it is structured through interpersonal relationships, and psychological in its manifestation in personality. Having pointed up the fact that social structure, at least in terms of social class and ethnic group affiliations, has a more or less consistent cultural influence on the socialization of levels of aspiration, greater attention to interpersonal relationships as a source of the variation in aspiration seems warranted. More specifically, the intervening behavioral factors of maternal training practices, parent-child relationships and their psychological correlates in the child's self-concept and achievement motivation appear to be more important in explaining the variation in the child's level of aspiration.

Self-Concept

The meaning of self-concept has been clarified by a parallel definition of self-esteem.

> By self-esteem we refer to the evaluation which the individual makes and customarily maintains with regard to himself: it expresses an attitude of approval or disapproval, and indicates the extent to which the individual believes himself to be capable, significant, successful, and worthy. In short, self-esteem is a "personal" judgment of worthiness that is expressed in the attitudes the individual holds toward himself. It is a subjective experience which the individual conveys to others by verbal reports and other overt behavior [Coopersmith, 1967, pp. 4-5].

Coopersmith (1967) elaborates on the nature of self-esteem first by pointing out the "relatively constant" nature of self-esteem. He asserts that while undoubtedly momentary, situational, and limited shifts occur in self-evaluation, the test-retest reliability obtained for the Self-Esteem Inventory suggests that before middle childhood the individual arrives at a general appraisal of his worth, which remains relatively stable and enduring. He further contends that this appraisal can be affected by specific incidents and changes but apparently reverts to its customary level when conditions resume their normal and typical course.

A second feature that Coopersmith points out is the generalized basis rather than unique and specific criteria for individual self-evaluation. While it is conceivable that unique talents and capabilities may be given disproportionate weight, enabling the individual to arrive at a general level of self-esteem, the data suggest that children make little distinction about their worthiness in different areas of experience (Coopersmith, 1967).

The third distinctive feature of self-esteem is the evaluation of judgmental process, in which the individual examines his performances, capacities, and attributes, which are largely associated with achievement (Campbell, 1967). In other words, the orientation toward achievement in American society, as reflected in the individuals successes, ideals, and aspirations, is the cultural context for personal evaluation.

The major basis for the study of self-concept is the widely held belief that self-esteem is significantly associated with personal satisfaction and effective functioning (Coopersmith, 1967). Most important for the present study, motivational research strongly suggests that striving for social status stems from the desire for social approval and favorable self-evaluation (Cofer and Appley, 1964; Newcomb, 1953).

Social Interaction and Self-Concept

In Argyle's (1967) theory of social motivation, the need for self-esteem and self-consistency is lifted up as one of seven motivations of social behavior. He stresses the fact that the origin of the need for self-esteem is in the favorable evaluations made by parents about their children. Secord and Backman (1964) support the fact that children accept, or at least partially accept, these valuations and seek to make later experiences and evaluations consistent with them.

The literature on self-concept consistently emphasizes the importance of significant others' influence on the child's self-evaluations (Davidson and Lang, 1960; McCandless, 1967; Roberts, 1967). This idea illustrated by a summary of findings with regard to the familial origin of self-concept by Wylie (1961): (1) children's self-concepts are similar to the view of themselves which they attribute to their parents; (2) the child's level of self-regard is associated with the parents' reported level of regard for him; and (3) children see the like-sex parents' self-concept as being more like their own as contrasted with the opposite sex parent's self-concept.

A synthesis of a variety of findings points to integration of significant others' influence, self-concept and motivation. Brim (1965) infers from studies of the influence of others in the development of self-concepts of high school students that an individual's motivation is derived from the desire to conform to perceptions and expectations of others who are significant to him. Furthermore, through the influence of significant others, changes in self-regard are shown to effect corresponding changes in achievement outcomes (Ludwig and Maehr, 1967).

The most recent research which has given the most definitive picture of the contribution of familial interaction to the development of self-esteem is that of Coopersmith's The Antecedents of Self-Esteem (1967). In summarizing his findings, he lists three major conditions which lead the developing person to value himself and to regard himself as an object of worth. First, there is the condition of "parental warmth," whereby the child senses the love and concern of his family and feels they see him as a person of value. Secondly, there is the condition of respectful treatment," whereby the child's views are considered and where he has a rightful and democratic position in the family. Finally, there is the condition of "clearly defined limits," whereby the child comes to know, through his parents' relatively high demands and expectations for success, that they genuinely care about his future. Together these conditions constitute a generally pervasive parental attitude of positive regard, affection, and high expectations for the child [pp. 164-234].

Of equal relevance are the indications that parental domination, rejection, and severe punishment of the child result in lowered self-esteem. Coopersmith (1967) contends that under such conditions children have fewer experiences of love and success and tend to become generally submissive and withdrawn, or, in the opposite extreme, aggressive and domineering.

Self-Concept of the Disadvantaged

Numerous investigators report that the professed self-concept of disadvantaged children are characterized by low self-esteem and self-depreciation (Ausubel and Ausubel, 1963; Crovett, et al., 1967; Hawk, 1967). Although evidence is inconclusive, some research indicates that the self-concept of the disadvantaged child is largely based on the status and self-esteem of the parents. One example is the case of the son of a laborer who aligns himself with a self-rejecting father (Roberts, 1967). Consequently, low ethnic and social status of the father may foster a negative self-image for the child.

Preschoolers have been found to be conscious of their ethnicity and a deeply ingrained negative self-concept has been associated with the black child's perception of himself in terms of societal rejection of Negroes (Roberts, 1967). This finding is especially true, according to Long and Henderson (1966), when rural disadvantaged Southern Negro children are compared with more advantaged children from the same community. That black children become aware of differences in skin color very early in their development is construed from Negro children's preference for white dolls over brown dolls (Clark and Clark, 1958; Goodman, 1952), and their assignment of brown dolls to poorer housing and inferior roles (Radke and Trager, 1950).

However, reviewers of this type of literature may have been guilty of unwarranted generalizations in concluding that such evidence suggests self-hate and negative self-evaluation. As two critics of this interpretation point out:

> It is a rather long jump in our opinion, however, from racial awareness, preference for white dolls, and assignment of inferior roles to brown dolls to self-hatred on the part of such children [McCarthy and Yancey, 1971, p. 658].

Contrary to the literature which "suggests" that self-evaluation differs by social class and ethnic group affiliation, there exists an emerging body of literature which is at variance with this position. For example, in a comparison of ethnic group self-esteem, Rosenberg (1965) concludes: "We see that Negroes, who are exposed to the most intense, humiliating, and crippling forms of discrimination in every institutional area, do not have particularly low self-esteem." The Negroes in Rosenberg's sample were representative of the lowest socioeconomic status group, which makes his finding that they were about average on his measure of self-esteem especially revealing.

Even more noteworthy are the conclusions of Baughman and Dahlstrom (1968) in their series of comparative studies of Negro and white eighth grade students in a rural Southern community. They conclude the self-concepts are "markedly positive," particularly for the Negro children. Furthermore, the Negro children report themselves as being more popular with their peers, and more satisfied with the kind of person they are, and they describe their home life as happier than do white children. Another recent comparative study of the self-perceptions of advantaged and disadvantaged elementary school children report generally more positive self-perceptions for disadvantaged children than for advantaged children (Soares and Soares, 1969). Some personality ratings have demonstrated Negro children to be more cheerful, curious, kind, and sensitive (Goodman, 1952), to have higher self-esteem (McDill, Meyers, and Rigsby, 1966), and to have equivalent "academic self-concept" when compared to white children (Coleman, et al., 1966).

In a recent critique of the general pathological interpretation of findings by social scientists regarding the study of racism and Negro personal disorganization McCarthy and Yancey (1971) assert:

> In their various attempts to demonstrate the negative consequences of caste victimization, social scientists have, in their description of the Negro American, unwittingly provided scientific credibility for many white-held stereotypes of the Negro [p. 650].

Not only when racial personality differences are reported is a pathological interpretation generally rendered, but also:

> It is interesting to note the impact of the traditional argument concerning race and self-esteem when one finds authors uncovering what is apparently negative evidence. Rosenberg is apparently surprised, while McDill et al., challange the validity of the measure and resort to intellectual gymnastics in order to reinterpret negative evidence into the traditional argument: "High self-esteem on the part of Negroes is a defence mechanism against discrimination." [McCarthy and Yancey, 1971, p. 659]

Thus, whereas some studies indicate a negative association between black racial status and self-concept, and whereas others fail to confirm any association at all, still others find higher levels of self-concept for those of lower social status origins. Such a lack of continuity in the findings suggest not only the operation bias, and situational variability, but also the possibility of a spurious relationship of ethnic factors to self-concept. More specifically, the critical factor is how the child interprets his parents' behavior and views toward him. As several authors have concluded, it is likely that the emotional climate of the family is more important than socioeconomic factors, and emotional factors conducive to low self-esteem can exist in both advantaged and disadvantaged families (Purkey, 1970).

Achievement Motivation

The achievement syndrome has been described by Rosen (1969) as comprised by the psychological factor of achievement motivation, which provides the internal impetus, and the cultural factor of value orientations, which provide the level of aspiration. As the internal impetus for mobility striving, the need for achievement is conceived as personal motivation which, in conjunction with achievement values, is necessary to effect upward mobility. Achievement motivation has been defined as:

> . . . an anticipation of an increase in effect aroused by cues in situations involving standards of excellence. The behavior of people highly motivated for achievement is persistent striving activity, aimed at attaining a high goal in some area involving competition with a standard of excellence. In relation to these standards of excellence the achievement oriented person directs his efforts toward obtaining the pleasure of success and avoiding the pain of failure [Rosen, 1956, pp. 204-205].

Consistent with sociological theory of mobility striving, achievement motivation has been found associated with the individual's ability to defer immediate gratifications (Lysgaard, 1954; Mischel, 1961; Strauss, 1962), and with the individual's willingness to take risks in order to reach goals (Heckhausen, 1967; McClelland, 1961).

Social Interaction and Achievement Motivation

Although achievement motivation has been shown to vary with social class (Rosen, 1956), ethnicity (Rosen, 1959), birth order (Sampson, 196[illegible]), family size (Rosen, 1961) and access to entrepreneurial environments (Turner, 1970), these studies relate the variation in achievement motivation to differential socialization practices of the parents, as do those studies by Hammond (1954), Kohn (1959), Komarovsky (1962), and McKinely (1964).

Investigators of child-rearing practices associated with strong achievement in the child suggest that not only high parental standards of performance are necessary but also parental encouragement for the child to attain these standards through his own activity. For example, Winterbottom (1958) suggests that training in independence is the crucial factor in the development of this motivation. Subsequent research, however, suggests that it is the parents' emphasis on achievement and not independence alone that seems to be related to strong achievement motivation (Child, et al., 1958); Krebs, 1958; Rosen and D'Andrade (1959) conclude that high achievement orientation is created less by early independence training than by the more direct transmittal of achievement values by the parents, whether they occur in the form of reward and punishment for achievement or in the form of a positive role model for achievement.

The emotional and affective climate of parent-child relationships, especially in the cases of mother and child, appears to be important in the child's level of achievement motivation. Winterbottom (1958) detects greater warmth, affection, and emotional involvement in good performance in the mothers of boys with strong needs for achievement. Maternal affection appears to facilitate, at least for sons, adoption of parental high standards of excellence. Several studies of over-achievers and under-achievers in college indicate that parents of the former are perceived as more sharing, approving, trusting and affectionate by their children. Also, they are perceived as encouraging achievement without exerting pressure (Hurley, 1962; Morrow and Wilson, 1961; Shaw and Dutton, 1962).

The quality of parental involvement, however, should be distinguished from the general level of intensity of involvement and the nature of the intervention of the parents. Generalizing from a variety of findings, McClelland (1961) concludes that excessive demands placed on the child may lead to a low level of achievement motivation. As Heckhausen (1967) notes:

> A massive, premature pressure for achievement on the part of the parents indicates rather a cold rejection of the child's needs which is not intended to further the child's self-reliance for its own sake. It appears not to further but rather to prejudice achievement motivation . . . [p. 155].

According to a majority of the findings, strong achievement motivation in boys is promoted in families where the mother takes an active role in stimulating achievement competence directly by positive and negative sanctions following the successful or unsuccessful outcome of the achievement situation. The optimal role for the father, on the contrary, is a less active and more benevolent model, respecting and furthering the son's autonomy by a sympathetic attitude toward self-reliance (Heckhausen, 1967). Rosen and D'Andrade (1959) conclude that high achievement motivation does not develop unless the father gives his son a good deal of automony so that the boy can test himself freely and gain confidence in his own skill at his own pace. If the father interferes in an authoritarian way, he seems to make the son more dependent and thereby impedes achievement motive development (Bradburn, 1963; Strodtbeck, 1958).

Achievement Motivation of the Disadvantaged

Early studies suggest that middle class youth possess stronger levels of desire for achievement than do either lower or upper class youth (Rosen, 1956). In contrast with the lower class, the middle class has been characterized more strongly by "activist" and "future-oriented" values that are conceived in terms of individual differences in ability (Kluckhohn and Strodtbeck, 1961; Kohn, 1959, 1959b; Leshan, 1952; Reissman, 1953). Achievement themes have been characterized as centered more around immediate material rewards in the lower social stratum (Hoffman, et al., 1958; Katz, 1964), and either an aggrandizing "past" orientation or "self-fulfillment" orientation in the upper social stratum (Kluckhohn and Strodtbeck, 1961; McArthus, 1955). These early differences in the nature and strength of achievement motivation have been construed as a basis for disparities in status attainment (Perrucci, 1967; Rosen, 1956).

Comparative racial studies indicate that blacks have lower levels of achievement motivation than do whites (Lott and Lott, 1963; Mingione, 1965; Rosen, 1959). One study further indicates that these results hold even when socioeconomic status and measured intelligence are controlled (Dreger and Miller, 1968).

Some other research, however, demonstrates the fact that a large number of lower class adolescents possess strong motivation for achievement (Scanzoni, 1967). Scanzoni concludes that lower class youth who are characterized by strong achievement motivation are those who perceive occupational success as attainable, thereby suggesting a link between occupational expectations and achievement motivation. Correspondingly, achievement motivation has been shown to have a high correlation with occupational aspirations (Elder, 1968). Littig (1968) indicates that among Negro college males strong achievement motivation and working-class identification arerelated to aspiration to traditionally closed occupations, whereas weak achievement motivation and middle class identification are related to aspirations for traditionally open occupations. Even more revealing are studies which indicate that the strength of the achievement motivation is related to the upward mobility of persons of lower social origin, but is not related to mobility of persons from middle or upper strata origins (Crockett, 1962; Minor and Neel, 1958; Veroff, 1965). Further evidence indicates that achievement motivation is more predictive of the eventual occupational status of lower class males than is any other single factor (Elder, 1968).

Self-Concept, Aspirations, and Achievement

An interrelationship between self-concept, achievement motivation, and aspiration should be anticipated inasmuch as: (1) the literature indicates similar familial relationship antecedents of both self-concept and achievement motivation; (2) both self-concept and achievement motivation are characterized as facilitators of a high level of aspiration and achievement; and (3) it would appear that much of the interrelationship is bi-directional, with achievement outcomes, in terms of academic and interpersonal successes and failures, reinforcing the relationships.

Recent summaries of studies of self-concept and achievement indicate that high self-regard and scholastic orientations and performances are positively correlated (Campbell, 1967; Pascal, 1968). One investigation of eighth grade Negroes reveals that the relationship between self-concept and academic achievement is greater than the relationship between measured intelligence and academic achievement (Gay, 1966). That self-concept is, to a degree, a function of academic performance is demonstrated by the contention of two critics that "the measures of self-concept might better be termed academic self-concept"(McCarthy and Yancey, 1971). Implicit in this statement is some support for the reciprocal relationship between self-concept and academic performance. On cause and effect Purkey (1970) concludes:

> . . . a great deal of caution is needed before one assumes that either the self-concept determines scholastic performance or that scholastic performance shapes the self-concept . . . the best evidence now available suggests that it is a two-way street, that there is a continuous interaction between the self and academic achievement, and that each directly influences the other, [p. 23].

Numerous investigations have reported a relationship of a variety of self-images to educational aspirations and expectations of rural youth. Whatever type of self-image was examined, a positive relationship with status projections has been generally observed (Kuvlesky, 1969). For example, Herriott (1963) concludes that intellectual self-concept is significantly related to educational aspirations when seventeen other variables are held constant. Another investigation of high school seniors reveals that the student's level of occupational aspiration reflects self-evaluation and feelings of personal worth (Schutz and Blocker, 1961). Also, in a comprehensive investigation of Negro high school students in four Southern states, self-confidence and self-satisfaction were found to be positively related to educational expectations (Cramer, et al., 1966).

As reviewed earlier, parental affection, independence training, and high parental expectations facilitate the child's feelings of personal worth and need for achievement. Because of this common behavorial antecedent, one could argue that need for achievement is largely derived from a need to please significant others through one's successess, thereby maintaining consistency in self-image. Support for this application of "self-fulfilling prophecy" at the individual level of analysis has been reviewed earlier with regard to the role significant others' play in the development of self-concept.

Summary and Hypothetical Model

Earlier in this paper [p. 9], the primary quest in aspiration research is noted as the identification of the variables and the processes which account for variation in aspirations within social groupings. In this paper an attempt was made toward identification of some of the numerous variables upon which aspirations are contingent and the complexities of the processes involved.

Within the presentation of the relevant literature the interrelation of cultural, social, and psychological processes related to status projections is stressed (see Yinger, 1965, pp. 18-37). First, the cultural value orientations of success and achievement are regarded as the generalized basis of status projections. Secondly, such value orientations are social in origin, that is, imparted through social interaction. Finally, the quality of social interaction is held to be influential in determining the extent to which achievement values are internalized by the individual.

These processes may be more precisely articulated by the following assumptions which are derived from the literature:

(1) Significant others' influence and status projections for the child and the child's perception of his mother's affective behavior constitute socialization factors serving to link socioeconomic background, mother's achievement values, and the child's measured intelligence with the child's status projections (after Herriott, 1963; Kandel, 1971; Kandel and Lesser, 1969; Rosen, 1964a; Sewell and Shah, 1967; Simpson, 1962; Strodteck, 1958).

(2) The child's self-concept and achievement motivation constitute personal factors serving to link socialization factors with the child's status projections (after Elder, 1962; McCandless, 1967; McClelland, 1953; Rosen, 1964a; Rosenberg, 1965; Slocum, 1967).

Derived from the above theoretical assumptions concerning achievement orientation, the following hypothetical sequence of blocks of variables is constructed to guide tabulation of the data. The more detailed list of study variables is found in Table 14 of the Methodology Chapter. Although commitment to this specific ordering reflects the researchers belief that this is likely the more realistic direction of flow of cause to effect and the conclusions reflect this ordering, it may be that in reality causality is reversed in some cases.

Antecedent	Intervening		Dependent
X. Family structure	VII. Mother's child-rearing value orientations	IV. Child's self-concept	I. Child's occupational & educational status projections
IX. Family socio-economic background and Mother's achievement orientations	VI. Child's perception of mother's affective behavior	III. Mother's status projections for child	
VIII. Child's measured intelligence and sibling order	V. Significant others' influence	II. Child's achievement motivation	

This hypothetical sequence of variables is obviously somewhat arbitrary and to represent variables that are not all clearly time-ordered in an independent-dependent fashion is an over-simplification of reality. This is, however, expedient for the examination of the relative influence of numerous variables upon the child's educational and occupational aspirations.

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CHAPTER III

SELECTION OF SAMPLE AND DESCRIPTION OF SURVEY CASES

The research subjects, 1412 children and their mothers, were drawn from three low-income areas in the Southeastern and Appalachian regions of the United States. Samples from three low-income sub-cultures, Urban Negro, Rural Negro, and Appalachian Rural White, were studied in each of two or more states. The numbers of cases from each of the participating states and the sub-cultures that each studied are shown in Table 1.

TABLE 1

Subculture and State Distribution of Baseline Subjects

State	Urban	Negro	Rural	Negro	Rural	White	Total	
	N	% of 353	N	% of 480	N	% of 579	N	% of 1412
Alabama	105	30	105	22			210	15
Kentucky	78	22			186	32	264	19
Mississippi			235	49			235	17
North Carolina					217	38	217	15
South Carolina			140	29			140	10
Tennessee					176	30	176	12
Virginia	170	48					170	12
Total	353	100	480	100	579	100	1412	100

The samples of fifth and sixth grade children were drawn from schools which served essentially depressed areas characterized by unemployment, school drop-out and poverty. When the study was begun in 1966, the schools in the areas studied were officially desegregated but children in the sample were attending schools which were essentially or exclusively populated by others of their own race. In some of the Appalachian areas studied there were no blacks or other races.

Children were characterized as from the rural sub-culture if they attended school and lived in the country or in a town with a population of less than 2500. Urban children were taken to be those who attended school in cities with 1960 populations of 50,000 or more. After obtaining cooperation of school administrators, the researchers gave the Otis-Lennon Intelligence Test and survey instruments (see Appendix A) to fifth and sixth graders in the schools selected.

Family data and addresses were obtained from the children and also from school records. Questionnaires were then administered to the mothers or, in a

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few cases, mother substitutes in group sessions or home visits (see Appendix B). A few child-subjects were dropped from the study when (a) attained IQ scores were below 60, (b) data sources were incomplete, or (c) mother or mother substitute was lacking or could not be interviewed. The various rates of non-response will be discussed in the Metnodology chapter. The following sources of information were available for the mother-child pairs retained: Otis-Lennon Intelligence Test scores and responses on the children's and mothers' questionnaires. The 1412 pairs with complete data represent the three Southern sub-cultures and make up the baseline study.

Ages of Children

The baseline data were obtained from the children in the spring of 1969. Fifth graders who had made normal progress in school should have been 10 or 11 years old at the time, while sixth graders with similar progress should have been 11 or 12. Actually, six percent of the children studied (Table 2) were 13 or more years old and thus overage for the sixth grade. If one assumes the same proportion of overage fifth graders, the estimated total percentage overage would be 13 or 14. Given the low-income school communities from which the children came, this is probably not surprising. It should be remembered, however, that a few children with very low IQ's were eliminated, and they were likely overage also. As the table indicates, the rural black sample had the most children 13 and over (11%), the rural whites the least (3%), and the urban blacks were intermediate in this regard.

TABLE 2

Age of Children by Subculture

Age of years	Urban	Negro	Rural	Negro	Rural	White	Total	
	N	% of 353	N	% of 480	N	% of 579	N	% of 1412
9			1	0	6	1	7	1
10	56	16	91	19	169	29	316	23
11	167	47	203	42	267	46	637	45
12	105	30	131	28	119	21	355	25
13	24	7	34	7	16	3	74	5
14	1	0	13	3	2	0	16	1
15			5	1			5	0
16			2	0			2	0
Total	353	100	480	100	579	100	1412	100

Status Characteristics of the Household

There were five measures of the status characteristics of the household that were used in the study. Family background (FBK) is a composite socio-economic status score based on the breadwinner's occupation, the level of schooling of the mother and of the father, and six items measuring social participation (voting, church attendance, memberships, etc.). Household size (HOZ) is simply a count of the persons in the household. The lack of a husband in the household is indicated by NOH. WEL indicates that the household receives income from welfare programs. MOG is the mother's age.

Since all of the respondent households are in low-income areas there is not a lot of variation between subgroups (See Table 2, Methodology Chapter). The urban black households have the highest family background score, the rural white households are intermediate, and the rural black households have the lowest level. The rural white households are smallest in numbers, the urban black intermediate, and rural black the largest. In all three groups households are much larger than the national averages, since by design all the survey households had children in school and were from low-income areas. There is little variation in average age of the mothers, though the rural blacks are slightly older. Urban black households have the highest proportion receiving some form of welfare assistance, with the rural white households intermediate and the rural black households lowest. The greatest differences are in the proportion of households with no husband, ranging from about a third of the urban blacks to a little less than a quarter of the rural blacks down to about one-twelfth of the rural white households.

As would be expected, there are some associations among these variables. As Table 3 indicates, the lack of a husband and being on welfare are rather strongly related and there is a smaller and negative association between the household size and the lack of a husband. The family background status also varies inversely with the age of the mother, that is family status declines for older mothers, but it is interesting to note that this is less true for the urban setting than in the rural. Being on welfare is also negatively associated with family background among rural white households and less so among black rural and black urban households. Similarly, family background and household size are negatively associated among rural whites but not blacks. The lack of a husband is correlated (negatively) with family background only among rural blacks. Household size and being on welfare show no particular relation, and the same is true of the mother's age and household size. The mother's age is not related to the lack of a husband or to being on welfare.

TABLE 3. Partial Correlations Between Status Characteristics Variables, by Subculture and Sex

Variables Correlated	All		Urban Black		Rural Black		Rural White	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
FBK and HOZ	-.10	-.10	-.02	-.09	-.07	-.03	-.20	-.20
FBK and NOH	-.08	-.04	00	.10	-.16	-.17	-.04	-.01
FBK and WEL	-.17	-.18	-.13	.01	-.09	-.20	-.25	-.25
FBK and MOG	-.22	-.22	-.08	-.10	-.30	-.26	-.21	-.25
HOZ and NOH	-.18	-.18	-.18	-.18	-.21	-.22	-.11	-.12
HOZ and WEL	.07	-.01	.08	-.11	.09	-.08	.05	.16
HOZ and MOG	-.04	-.05	-.02	-.01	-.03	-.10	-.06	-.04
NOH and WEL	.30	.39	.36	.43	.31	.40	.27	.37
NOH and MOG	.02	.10	-.09	.13	.05	.06	.08	.12
WEL and MOG	00	.09	-.08	.02	-.03	.18	.07	.07

Family Composition

The great majority of the households (70%) consisted only of nuclear families--the mother, father, and children (Table 4). Extended family households, whether including the father or not, accounted for 17 percent of the cases. The remaining 13 percent included only mothers and children. However, the father-absent households, which represented 24 percent of the total sample, accounted for 34 percent of the households in the urban Negro and 31 percent in the rural Negro households, but only 11 percent in the rural white households. By way of further comparison of sub-groups, a separate tabulation showed that two-thirds of the rural black children surveyed had two or more siblings, as compared with two-fifths of the rural white children and a little more than half of the urban black children.

TABLE 4

Family Composition by Subculture

Composition	Urban	Negro	Rural	Negro	Rural	White	Total	
	N	% of 353	N	% of 480	N	% of 579	N	% of 1412
Mother, Father Children Only	206	58	285	59	502	87	993	70
Mother, Father Children, Others	28	8	50	10	10	2	88	6
Mothers and Children only	80	23	61	13	35	6	176	13
Mother, Children, Others	39	11	84	18	32	5	155	11
Total	353	100	480	100	579	100	1412	100

Education of Parents

Each mother was asked the highest grade in school she had completed. She was also asked for similar information on her husband (See Tables 5 and 6). The mean grade for the mothers was 8.6 with a median grade of 9. The mean grade for the fathers was 7.7 with a median of 8. There was no appreciable difference between races in rural areas. However, urban Negroes revealed a median education of 11th grade for the mothers and 10th grade for the fathers which was two years beyond the median education for the mothers and fathers from the other sub-cultures. Somewhat more rural Negroes than whites had had less than four years of education (functional illiteracy level) and more rural whites than either Negro group had finished high school or gone beyond.

TABLE 5

Years of Schooling for Mothers by Subculture

Years of Schooling	Urban N	Negro % of 353	Rural N	Negro % of 480	Rural N	White % of 579	Total N	Total % of 1412
4 yrs or less	4	1	46	10	36	6	86	6
5-8 yrs	62	18	242	50	292	51	596	42
Some high school (9-11)	164	46	133	28	131	23	428	31
Completed high school	114	32	54	11	102	18	270	19
Beyond high school	9	3	5	1	18	3	32	22
Total	353	100	480	100	579	100	1412	100

TABLE 6

Years of Schooling for Fathers by Subculture

Years of Schooling	Urban N	Negro % of 353	Rural N	Negro % of 480	Rural N	White % of 579	Total N	Total % of 1412
4 yrs or less	19	5	107	22	64	11	190	14
5-8 yrs	90	26	295	62	323	56	708	50
Some high school (9-11)	171	49	48	10	108	19	327	23
Completed high school	64	18	25	5	65	11	154	11
Beyond high school	9	2	5	1	19	3	33	2
Total	353	100	480	100	579	100	1412	100

Employment and Source(s) of Income

Of the fathers who were present in the households of each sub-culture, an overwhelming majority of 90 percent were employed. Very small percentages were retired or disabled and surprisingly few, 4 percent, were reported as currently unemployed. The fact that unemployment was higher among the rural white fathers than among either group of Negro fathers is interesting to note. (See Table 7).

Approximately half (54%) of the mothers stated that they were housewives only, and were not employed outside the home (Table 8). For every white rural mother employed outside the home, there were two who were full-time homemakers. For both rural and urban black mothers three were employed for every two at home. However, somewhat more black than white mothers were part-time employees. As in the case of the fathers, very few were unemployed and seeking work.

TABLE 7

Employment Status of Fathers by Sub-culture

Father's Employment	Urban	Negro	Rural	Negro	Rural	White	Total	
	N	% of 353	N	% of 480	N	% of 579	N	% of 1412
No father	108	31	107	22	46	8	261	18
Unemployed	8	2	12	3	31	5	51	4
Employed	226	64	336	70	464	80	1026	73
Disabled	9	2	19	4	28	5	56	4
Retired	2	1	5	1	10	2	17	1
No usual work Never employed			1	0			1	0
Total	353	100	480	100	579	100	1412	100

TABLE 8

Employment Status of Mothers by Sub-culture

Hours worked per week	Urban	Negro	Rural	Negro	Rural	White	Total	
	N	% of 353	N	% of 480	N	% of 579	N	% of 1412
Housewife only	147	42	218	46	393	68	758	54
35 or more hrs/week	126	36	165	34	138	24	429	30
20-35 hrs/week	39	11	54	11	28	5	121	9
Fewer than 20 hrs/week	36	10	27	6	10	2	73	5
Usually work but now unemployed	5	1	16	3	10	1	31	2
Total	353	100	480	100	579	100	1412	100

When asked the primary source of their family's income, three out of every four mothers reported salary or wages as the primary source (Table 9). Social Security benefits and public welfare grants were of about equal importance, being reported as "most important source" by 7-9 percent. It is perhaps surprising, in light of the decline in the number of farm operators, that even among the rural samples only 6 percent of the Negroes and 12 percent of the whites said operating a farm was the most important source of income. The percentages of families who reported receiving their main income from welfare seem low relative to their apparent low economic status.

TABLE 9

Main Source of Families' Income as reported by the mothers

Source of income	Urban N	Negro % of 353	Rural N	Negro % of 480	Rural N	White % of 579	Total	
							N	% of 1412
No response	1	0					1	0
Salary and/or wages	278	79	371	77	401	69	1050	74
Profit/farm	4	1	27	6	68	12	99	7
Rent Property			1	0			1	0
Board money								
Money from children out of home	4	1	7	1	1	0	12	1
Social Security	28	8	30	6	47	8	105	8
Government Welfare	31	9	32	7	37	7	100	8
Unemployment Compensation	3	1			6	1	9	1
Other	4	1	12	3	18	3	34	2
Total	353	100	480	100	579	100	1412	100

Social Participation and Communication of Mothers and Children

In addition to the economic and other disadvantages of low-income people, research has shown that such people generally have a very low level of involvement in organizational, social, and civic activities and this has been interpreted as a result of their low status which further handicaps them and their children in breaking out of the poverty cycle. In the present study, the mothers were asked questions concerning participation in church and whether they were registered and had voted recently. Also, as a indication of their contact with the outside world, the mothers were questioned about the amount of time they spent viewing television.

Church membership and attendance were relatively high for all of the groups. Taken as a whole 82 percent of the sample belonged to an organized church, and almost 60 percent reported attending with reasonable regularity. The white and black mothers differed substantially on this variable. A quarter of the rural white mothers said they neither attended nor belonged to a church, while less than 10 percent of the urban and rural black mothers made this statement. The rural Negro mothers most often reported church ties, with 97 percent claiming either attendance and/or membership. On the basis of reported attendance, whether belonging or not, rural Negroes ranked highest with 82 percent, urban Negroes next with 59 percent, and rural whites last with 51 percent. (See Table 10)

TABLE 10

Church Participation of Mothers by Subculture

Church Participation	Urban N	Negro % of 353	Rural N	Negro % of 480	Rural N	White % of 579	Total N	Total % of 1412
Belong/attend	206	59	387	81	239	42	832	59
Belong/doesn't attend	114	33	75	16	140	24	329	23
Doesn't belong/ attends	7	0	7	1	54	9	68	5
Doesn't belong/ doesn't attend	26	8	11	2	146	25	183	13
Total	353	100	480	100	579	100	1412	100

More than two-thirds of the mothers were registered to vote. The rural white mothers were the most likely to be registered and to have voted during the past two years, with 8 in 10 saying they were registered, and 7 in 10 saying they had voted (Table 11). However, the Negro mothers were not far behind, with about 7 in 10 of each group claiming registration and 6 in 10 saying they had voted. In each group, almost all of those who were registered had also voted (about 9 out of 10). Interestingly, the proportions of those registered who had voted within the last two years were approximately the same for each of the three sub-cultures. If these self-reports are not inflated, they represent a surprisingly high level of political participation among these groups, possibly influenced by recent voter registration recruiting efforts.

TABLE 11

Voter Registration and Voting Record by Subculture

Mothers	Urban N	Negro % of 353	Rural N	Negro % of 480	Rural N	White % of 579	Total N	Total % of 1412
Not registered	114	32	152	32	113	20	379	27
Registered	239	68	328	63	466	80	1033	73
Total	353	100	480	100	579	100	1412	100

Practically all the families had access to television, and both sample mothers and children spent some time each day viewing it. The median estimated hours of viewing per day fell in the one-to-two hours range for both mothers and children, except in the case of rural Negro children where the median fell in the three-to-five hours category (Tables 12 and 13). Very few mothers in any group reported watching more than five hours daily, but in both Negro groups, more than 10 percent of the children were reported to view TV for five or more hours in contrast to only 3 percent of the rural white children who viewed this much.

TABLE 12

Extent of Children's TV Viewing as Reported by Mothers by Subculture

Average Hours Per Day	Urban N	Negro % of 353	Rural N	Negro % of 480	Rural N	White % of 579	Total N	Total % of 1412
1 hour or less	49	13	59	12	118	20	226	16
1-2 hours	129	37	153	32	230	40	512	36
3-5 hours	110	31	164	34	154	26	428	30
More than 5 hours	51	14	57	12	15	3	123	9
None or no TV	14	4	41	9	62	11	117	9
No response			6	1			6	0
Total	353	100	480	100	579	100	1412	100

TABLE 13

Extent of TV Viewing as Reported by Mothers by Subculture

Average Hours Per Day	Urban N	Negro % of 353	Rural R	Negro % of 480	Rural N	White % of 579	Total N	Total % of 1412
1 hour or less	45	13	59	12	109	19	213	15
1-2 hours	172	49	206	43	285	49	663	47
3-5 hours	119	34	172	36	161	28	452	32
More than 5 hours	13	3	11	3	2	0	26	2
None or no TV	4	1	30	6	22	4	56	4
No response			2	0			2	0
Total	353	100	480	100	579	100	1412	100

CHAPTER IV

DESCRIPTION OF INSTRUMENTS

In this section the instruments used in the survey will be discussed in terms of their original appearance in the literature, their planned contribution to the present study, and any adaptations to their wording or administration that were introduced. Each sub-section will also include the variable names and acronyms (see Appendix C) and the item numbers and pages where they appear in the questionnaires. Additional summary information for each variable appears in Appendix C.

This chart presentation includes a brief description of the variable, its acronym, the variable item numbers in the mother's and child's questionnaires, and a summary statement of the scoring for each item. A report of the factor analyses performed or the various scales appears in Methodology Chapter.

INTELLIGENCE QUOTIENT -- DIQ SCORE FROM THE OTIS-LENNON MENTAL ABILITY TEST, 1967.

The new edition of the Otis IQ test, Elementary II level, Form J, was used to measure subjects' IQ. The materials accompanying the tests include discussions on Otis-Lennon DIQs, percentile ranks, and stanines by which one can place a child's score in the context of the national standardization based on scores of 200,000 children. Research on this edition of the test also includes the relationship between the Otis-Lennon and the Stanford Achievement Test.

During pretesting sessions of the Otis-Lennon with children the same ages as the survey children, answer sheets suitable for machine scoring were used. Later it was decided that individual test booklets would be easier for the children to use and this method was adopted throughout the region. The test was administered and scored according to instructions in the manual. Authors of the Manual state, "It should be clearly understood that the Otis-Lennon tests do not measure the innate mental capacity of the pupil. There is, indeed, no test of mental ability which can support such a claim," (page 4). The authors continue as below:

> Measures of mental ability or scholastic aptitude similar to the Otis-Lennon have been criticized for their alleged "unfairness" to the culturally disadvantaged pupil. The charge has been made that these instruments place a premium upon those verbal and academic abilities in which the culturally impoverished child is often deficient. It must be remembered that tests such as these are designed primarily to assess the pupil's current readiness to school-oriented learning or to predict his likelihood of future success in dealing with the types of tasks encountered in his academic work. Thus, these ability tests contain items measuring

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> those verbal and numerical abilities requisite for success in schoolwork. Although the test items do not measure direct mastery of the types of learning taught in the classroom, they nevertheless bear a resemblance to academic material by virtue of their stated purpose--the prediction of academic success.
>
> It should be emphasized once again that these ability tests do not measure native endowment, nor should the notion of constancy, or fixity, of ability level be associated with the test results. Misinterpretations such as these typically result in the curtailment of educational opportunities for the culturally disadvantaged child. In reality, the biased or "unfair" aspect of ability testing stems from such misuse of test results and not from the types of tasks included in the measuring instrument.

The Technical Handbook (Otis & Lennon, 1969) shows correlations of the Otis-Lennon test with various achievement tests and reports validity coefficients in the .60-.80 range. The authors state that this range "indicates that similar abilities underlie performance on the Otis-Lennon and on these various achievement batteries," (page 29). Correlations with the Stanford Achievement Test indicate that children in the fifth and sixth grade who score below the range of DIQ 101-107 would have "expected" grade score levels below average on the nine subtests that make up the Stanford Achievement Test.

DIQ means "Deviation IQ" based on comparison with chronological age of the standardization group. The chart on page 16 of the manual shows: 128 and above (4%) Superior; 112-127 (19%) Above Average; 88-111 (54%) Average; 72-87 (19%) Below Average; 71 and below (4%) Low. This chart also shows percentiles and stanines.

In this project the child's DIQ score was used in helping decide whether the child understood the other instruments administered adequately enough to have the data retained in the study. It should be understood that tables of DIQ scores reported herein represent children retained in the study, not all the children tested.

REFERENCES

Otis, A. and Lennon, R. Otis-Lennon mental ability test. New York: Harcourt, Brace and World, Inc., 1967.

Otis, A. and Lennon R. Otis-Lennon Technical Handbook. New York: Harcourt, Brace, and World, Inc., 1969.

CHILD'S ACADEMIC LIKING (AC)--ACADEMIC AND ACHIEVEMENT MOTIVATION

Items 19-24 (Edler - Academic Motivation) and 25-44 (Weiner - Achievement Motivation), Student Survey Form -- Baseline Edition, pages 3-5.

"Academic Liking" is the designation for the variable that represents a combination of the modified Academic Motivation items (from the Youth Study as reported by Edler) plus four items from Weiner's Achievement Motivation scale (unpublished)*. The two scales will be discussed separately below.

The Academic Motivation items (Items 19-24) were taken from the Youth Study booklet used by the Institute for Research in Social Science, University of North Carolina. It consists of Items 49, 53, 54, 56, and 58 of that booklet and are discussed in Chapter II by Elder (1962) in Adolescent Achievement and Mobility Aspirations. A sixth item was suggested by Tennessee and added by the regional committee: "If I had my way about coming to school, I would come. (Always, most of the time, sometimes, hardly ever, never)". This six-item scale proved quite satisfactory on factor analysis.

The Weiner Achievement Motivation scale (items 25-44) was also used in the child's questionnaire in an attempt to ascertain the child's overall motivation in contrast or in addition to his motivation to achieve academically. Studies using this 20-item scale have not been found,* although the use of a somewhat similar type scale was reported in Smith (1969). Factor analysis on the scale showed four factors which were included in early regression runs. However, it was found that his was not a fruitful analysis and therefore only one four-item factor--labeled "Child likes school"--was combined with the ACMO variable. The four items making up this factor were: When I am sick I would rather rest and relax; try to do my school work. I like giving reports before the class; don't like giving reports before the class. After summer vacation I am glad to get back to school; not glad to get back to school. If I were getting better from a serious illness, I would like to spend my time learning how to do something; relax. In summary, in the final regression runs the six academic motivation items were combined with four achievement motivation items to make one score which was titled Academic Liking (AC). The other sixteen items from the achievement motivation scale were not used.

CHILD'S PERCEPTION OF MOTHER'S DEGREE OF COMMUNICATION AND INDEPENDENCE TRAINING (COM) (EDLER SCALE). Items 45-49, Student Survey Form -- Baseline Edition, page 6.

This scale was adapted from questions used in the twenty-two page Youth Booklet which was prepared by the Institute for Social Research of the University of North Carolina under the direction of Charles E. Bowerman. (The Youth Study questionnaire was given to about 25,000 junior and senior high school students in North Carolina and Ohio, and results have been reported by Elder (1962a, 1962b, 1962c, 1963a, 1963b, 1964, 1965, 1966).)

FOOTNOTE

* A copy of items was obtained from Dr. Bernard Weiner, the originator.

REFERENCES

Elder, Glen. Adolescent achievement and mobility aspirations. Chapel Hill, North Carolina: Institute for Research in Social Science, 1962. (Also see other articles by Elder in the section on independence training items COMM (IND).)

Smith, Charles P. (Ed.) Achievement-related motives in children. New York: Russell Sage Foundation, 1969.

Elder discussed this group of questions (Youth Study Nos. 49, 53, 54, 56, and 58) in Chapter II of the monograph Adolescent Achievement and Mobility Aspiration. He stated that a Guttman scale analysis indicated that the responses should be dichotomized and thus scored zero and one. The project statistician's analysis concurred with Elder's statements. Although the factor analysis showed that the items did not hang together very well, the total score itself proved meaningful in the regression analysis.

Because it was believed that the questions and some of the responses to be checked were too complicated for fifth and sixth grade children, the items were pretested (and even test-retesting was done) from pretest information the regional committee approved. The questions are listed at the end of this discussion with the Youth Study items given first in each instance for comparison. Questions and responses were made more consistent with the type used on the Bronfenbrenner scale because it was felt the sample children would follow this form better.

The scoring is dichotomous with responses being scored one or zero as follows: Items 45-48, response 1 or 2, scored one; response 3, 4, or 5, scored zero. Elder used this type scoring as did Proctor after analysis. Item 49 is shown in more detail and include the designation given each of the response choices. (Elder labeled this "structure of the child-rearing relationship" and did extensive analysis of this one question alone.)

Items

When you don't know exactly why your mother is going to punish or discipline you, will she explain the reason to you? (Always, almost always, usually, sometimes, very seldom.)

45. When she punishes me she tells me why, if I don't know. (Always, most of the time, sometimes, hardly ever, never.)

When you don't know why your mother makes a particular decision or has certain rules for you to follow, will she explain the reason? (Never, once in a while, sometimes, usually, always.) ,

46. When she decides things or makes rules for me, she tells me why. (Always, most of the time, sometimes, hardly ever, never.)

How often does your mother discipline or punish you by reasoning with you, explaining, or talking to you? (Very often, frequently, once in a while, very seldom, never.)

47. When I do something she doesn't like, she talks to me and explains or reasons with me, instead of punishing me. (Always, most of the time, sometimes, hardly ever, never.)

Does your mother let you have more freedom to make your own decisions and to do what you want than she did two or three years ago? (Much more, a little more, about the same, a little less, much less.)

48. Does she let you decide things for yourself more than she did a year or two ago? (Much more, a little more, about the same, a little less, much less.)

In general, how are most decisions made between you and your mother?

____1. My mother just tells me what to do. (Autocratic)
____2. She listens to me, but makes the decisions herself. (Authoritarian)
____3. I have considerable opportunity to make my own decisions, but she has the final word. (Democratic)
____4. My opinions are as important as my mother's in deciding what I should do. (Equalitarian)
____5. I can make my own decision but she would like me to consider her opinion. (Permissive)
____6. I can do what I want regardless of what she thinks. (Laissez-Faire)
____7. She doesn't care what I do. (Ignoring)

How are most things decided between you and your mother?

____1. She just tells me what to do.
____2. We talk about it, but she usually does the deciding.
____3. We talk about it, but I usually get to do what I want.
____4. I can do what I want no matter what she thinks.

As can be seen, four of the five questions have to do with use of explanation, reasoning, and "talking about". Elder labeled the items "Independence Training", because he felt the more a mother explains, reasons, and talks about decisions with her child, the more likely it is that the child is being prepared for responsibilities of adult life.

Other investigators, such as Winterbottom (1958) and Chance (1965, based on Winterbottom), and Coopersmith (1967) have used this term with other connotations and different type questions. Therefore, a more operational definition for the five items as used in this regional study might be "degree of verbalization" or "degree of communication". The label COMM has been used in this study to stress the element of verbalization.

REFERENCES

Chance, J. E. *Independence training and children's achievement.* Paper read at Society for Research in Child Development, Minneapolis, March, 1965.

Coopersmith, Stanley. *The antecedents of self-esteem.* San Francisco: W. H. Freeman and Co., 1967.

Elder, Glen H. Jr. *Adolescent achievement and mobility aspirations.* Chapel Hill, North Carolina: Institute for Research in Social Science, 1962.

Winterbottom, Marian. The relation of need for achievement to learning experiences in independence and mastery. In J. W. Atkinson (Ed.), *Motives in Fantasy, Action, and Society*, Princeton, N. J.

BRONFENBRENNER PARENT BEHAVIOR QUESTIONNAIRE--MOTHER'S BEHAVIOR AS PERCEIVED BY THE CHILD

Loving (LV), Demanding (DM), and Punishing (PU). Items 50-94, Student Survey Form--Baseline Edition, Pages 6-10.

The Bronfenbrenner Parent Behavior Questionnaire was used in the regional study to assess the mother-child relationship as perceived by the child.

Devereux, Bronfenbrenner, and Suci (1962) published the first report on this forty-five questionnaire; and Devereaux, Bronfenbrenner, and Rodgers (1969) published a second cross-cultural study. Siegelman (1965, 1966) reported the factor analysis on which this study is based. No published studies have been reported since then, but the instrument is described briefly in Tests and Measurements in Child Development (Johnson and Bonmarito, 1971).

In many studies longer instruments have been used, but the regional committee felt that the Bronfenbrenner instrument was sufficient, since the aspect of mother-child relationships was only one of many aspects being explored in the study. Analysis has indicated some strong relationships, so this instrument appears to have been a good choice. It should be kept in mind that the five Elder Items were also used to assess the mother's behavior as perceived by the child, and that there might be some interest in ascertaining if the Elder items give an added dimension to the Bronfenbrenner factors.

Proctor, the project statistician, carried out a factor analysis on the responses of the 1412 children involved in this study and found essentially the same groupings. The items which are scored under each factor are: Loving (Factor I)--50,54, 57, 58, 62, 65, 66, 70, 73, 74, 76, 80, 83, 87, 88, 90, 94; Punishing (Factor II)--75, 77, 78, 79, 82, 84, 85, 86, 91, 92, 93; and Demanding (Factor III)--51, 52, 53, 55, 56, 59, 60, 61, 63, 64, 67, 71, 72.

After a second factor analysis, it was decided that some of the "Loving" items could be grouped separately and called "indulgence," however, for the purpose of this study the regional analysis used the three factors originally found. It should be kept in mind that before Siegelman factor analyzed the items, they were grouped into fifteen clusters of three items each and that Siegelman's three factors take the place of the fifteen clusters.

Siegelman (1965) defines the three factors as follows:

> Factor I, labeled "Loving," depicts a parent who is readily available for counsel, support, and assistance. This parent enjoys being with his child, praises him, is affectionate, concerned, and has confidence in him.
>
> Factor II, "Punishment," shows the greatest amount of consistency on the scale factor loadings. This factor characterizes a parent who often uses physical and nonphysical punishment with little concern for the feelings and needs of his child, and frequently for no apparent reason. Although rejection or hostility by the parent is not explicitly noted in the items, it is strongly suggested.

A controlling, demanding, protecting, and intrusive parent is depicted in Factor III, "Demanding." This parent insists on high achievement, explains to his child why he must be punished when such discipline is necessary, and becomes emotionally upset and distant when the child misbehaves.

REFERENCES

Bronfenbrenner, Urie. "Some Familiar Antecedents of Responsibility and Leadership in Adolescents." In Petrullo and Bass (Eds.), Leadership and Interpersonal Behavior, 1960.

Devereux, Edward C., Bronfenbrenner, Urie, and Suci, George J. Patterns of parent behavior in America and West Germany: A cross-national comparison." International Social Science Journal, 1962, 14, 488-506.

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Johnson, Orval G., and Bonmarito, James W. Tests and measurements in child development. Jossey-Dass, San Francisco, 1971.

Siegelman, Marvin, Evaluation of Bronfenbrenner's questionnaire for children concerning parental behavior. Child Development, 1965, 163.

Siegelman, M. Loving and punishing parental behavior and introversion tendencies in sons. Child Development, 1966, 986.

SELF-CONCEPT SCALE (SEL)

Items 95-116, Student Survey Form--Baseline Edition, pages 10-12.

This scale was developed and reported by Lipsitt (1958) in an article entitled "Self-Concept Scale for Children and its Relationship to the Children's Form of the Manifest Anxiety Scale." It consists of twenty-two descriptive words or phrases which the child checks according to how well he believes it describes the way he feels about himself. (The scale can also be used to describe a child's "ideal" self.) Although this scale has been used in conjunction with other instruments and incorporated into some questionnaires, probably the best source of data for comparative purposes is still the Lipsitt article. However, the scoring for this regional study omitted the item "Brave;" therefore, any comparisons would have to take this into account. For use with children in the study some items were slightly modified or amplified in an effort to try to aid the child's understanding. Parenthetical descriptions were added to ten items in order to accomplish this.

Before choosing the Lipsitt scale it was pretested along with other instruments. The fact that the Lipsitt items had been used by other researchers for 5th and 6th graders made the scale appealing, particularly since other scales seemed too difficult for this age level.

REFERENCES

Lipsitt, L. P. "A Self-Concept Scale for Children and its Relationship to the Children's Form of the Manifest Anxiety Scale." Child Development, 1958, 29, 463-72.

MOTHER'S ANOMIA--ALIENATION (ANO)

Items 16, 18, 20, 22, and 24, Mother Survey Form--Baseline Edition, page 3-4.

The Anomie items were modified from Leo Srole's Anomia Scale as described by Bonjean (1967). The regional committee revised the wording in some statements in an attempt to make the items easier for the mothers to comprehend; however, even after revision the items seemed to be difficult to administer. The items were interspersed with the mother's achievement value items.

The anomic response by the mother on these items is "Agree". The project statistician used the scoring method described in Miller and Butler (1966) as a reference. After a factor analysis was decided to score according to "Anomic" and "Eunomic," with a score of "1" representing the former and "0" the latter.

REFERENCES

Bonjean, Charles M. Sociological Measurement. San Francisco: Chandler, 1967, 33-37.

Miller, C. R. and Butler, E. W. "Anomia and Eunomia: A Methodological Evaluation of Srole's Anomia Scale." American Sociological Review, 1966, 31, 400-406.

MOTHER'S ACHIEVEMENT VALUE ORIENTATION (ACM)

Items 17, 19, 21, 23, 25, 26, and 27, Mother Survey Form--Baseline Edition, pages 3-4.

The items measuring achievement value orientation of the mother were compiled and modified from various sources, primarily Rosen (1964). In the questionnaire they are interspersed with the Srole anomia statements. "Disagree" is the achievement value response.

Rosen (1964) used nine achievement items in a study entitled "Family Structure and Value Transmission", in which both the mother and her son (age range from 7 to 14) were asked the questions. He stated in his article that the items are "modified from Kluckholn's (1950) schema, which has been shown to be related to achievement in our society (Rosen, 1956)." He also refers to an article written by himself in 1959.

The Rosen items were pretested with fifth and sixth grade children in the classroom setting. It was found that the items were too difficult for the children to comprehend and answer reliably; therefore, the items were used only in the Mother's Questionnaire. Seven of Rosen's nine statements were used. A factor analysis indicated that the eight-items should be scored as one factor.

As mentioned in the description of the anomia scale, interviewers seemed to find it difficult to administer these items measuring achievement values.

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Kluckholn, F. Dominant and substitute profiles of cultural orientations. *Social Forces*, 1950, *28*, 376-393.

Rosen, B. The Achievement Syndrome: A psychocultural dimension of social stratification. *American Sociological Review*, 1956, 21, 47-60.

Rosen, B. Race, ethnicity, and the achievement syndrome. *American Sociological Review*, 1959, *24*, 47-60.

Rosen, B. Family structure and Value Transmission ~~achievement motivation~~. Merrill-Palmer Quarterly, ~~American Sociological Review~~, ~~1961~~, ~~26~~, 574-585.
1964 10, 59-76.

MOTHER'S VALUES SCALE--CHARACTERISTICS OF CHILDREN VALUED (CHA and OUT)
Item 29, Mother Survey Form--Baseline Edition, page 4.

These two variables are based on Kohn's Parental Values scale which was originally reported in several articles. Kohn's book, *Class and Conformity, A Study in Values*, published in 1969, summarizes these articles. Reference is made to his writings for an understanding of his research studies; thus, only a brief description of the scale will be included in this paper. However, it may be interesting to note here that Kohn compiled percentages for items chosen as one of the three most valued and then compared responses of middle and working class mothers.

The mother was presented sixteen brief statements concerning characteristics of children, and then she was asked to select the three that she thought were the most important for a child her own child's age. (The actual number of items presented has sometimes varied in different studies.) A factor analysis of the items was completed by Proctor. One factor, CHA, was defined as "Mother wants her child to have character" (preponderance of choices from Nos. 3, 7, 8, 12, 13). Another, OUT, was defined as "Mother emphasizes an outgoing child," (preponderance of choices from Nos. 1, 9, 10, 14, 15).

Kohn also asked mothers questions about their methods and reasons for discipline, and found that their training practices seemed to agree with the characteristics they valued. For comparison with Kohn's studies, the regional data would need to be stated in terms of percentages.

REFERENCES

Kohn, M. *Class and conformity: A study in values*. Homewood, Illinois: The Dorsey Press. 1969.

Questionnaire items not reported in detail are outlined below:

STUDENT'S SURVEY FORM--Baseline Edition
Background Information--Items 1-7, page 1.
Occupational Aspirations--Items 8-16, pages 1-3.

MOTHER'S SURVEY FORM--Baseline Edition
Occupational Aspirations for the Child--Items 1-6, pages 1-2
Exposure to Larger Society--Items 7-15, pages 2-3
Occupation of Parents--Items 30-31, page 4-5
Residence Status--Items 32-33, page 5.
Sources of Family Income--Items 34-35, pages 1-6
Family Composition--Item 36, page 6.

PRETESTING RESEARCH MATERIALS

The pretesting was conducted in several stages. Participating states pretested various scales, measures, and blocks of questions believed to be appropriate for the students' questionnaire from January to July of 1968. Several states interviewed small numbers of mothers, using all or parts of the tentative mothers' schedule. Much of the student pretesting was done in summer schools. Results of this testing were analyzed and tentative complete schedules were prepared for final pretesting.

All states participated in the final pretest in October and November of 1968, administering the students' questionnaires to at least one classroom and interviewing a few of the mothers of these children. On the basis of this pretesting final decisions on choice of content and question structure were made in December. Relatively few changes were made from the version used in the final pretest. A subcommittee edited and revised the schedules and submitted them to the committee for review. In January, 1969, the "Survey of Student Plans for Work and School" and the "Mother's Survey of Occupational and Educational Goals for Children" were adopted for final duplication.

CHAPTER V

METHODOLOGY FOR THE BASELINE SURVEY

This paper is concerned with the representativeness of the data and with the choice of statistical methods. In reality these two issues are as sides of the same coin. Their unity is established by a probabilistic representation of the data that reflects: (1) the way the variables change through time, (2) the sample selection process, and (3) the measurement process. Uncertainty characterizes all three of these phenomena underlying the data and relative frequencies of the possible survey outcomes become the probabilities of the representation. Parameters of this probabilistic representation constitute the population quantities to be inferred about, and the statistical methods are designed to estimate these parameters.

The first task of the following discussion is thus to justify three inferential leaps. (1) Although the data were collected at one point in time they are to be used for understanding the way ambition is formed in the child as a process going on in time. (2) Although only 1,412 mother-child pairs were surveyed, the findings are considered representative of many more mother-child pairs. Finally, (3) although the measurements are fallible, due to misunderstandings of the questions arising from inept wording, misreadings, inattention and coding mistakes, the relationships that can be asserted to hold would be expected to be of even greater magnitude if the measurements could be refined. After touching on these fairly theoretical issues, the computational techniques that were applied to the data will then be reviewed.

Inferring Dynamical Laws from Cross Sectional Data

The uncertainty of inferring from a one-shot survey, rather than a longitudinal one, to a time process is common to much survey work. Its tenuousness has led in many instances to the popularity of the longitudinal survey, and in the present case, it led to including an experimental phase as an integral part of the research design. Nonetheless, there are some conditions under which inter-relationships established using a spatial frame may also be found for a temporal frame. These can be illustrated as follows for the present survey.

If every mother-child pair were subject to the same dynamical laws and if all such pairs had started from much the same beginning point, only being exposed to somewhat different random shocks acting first on the basic causal variables, and if, having fixed these, the dynamical laws along with further random disturbances were responsible for setting the ambition-related dependent variables, then spatial relationships would mirror the temporal ones. More specifically, if the manifestation of relatively low IQ in a child lead through time to setting his educational expectations at a relatively low level, then having two spatially distinct, yet contemporaneous, children, it may be often discovered that the one with the lower IQ has the lower educational expectations.

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Although the slope parameter of the regression model equation for the cross sectional survey will be estimated in the following data analyses, it should be pointed out here that there is only one direct quantitative tie between it and any parameter of the dynamical process. This is, if there is no dynamic relationship then the regression slope will be zero. Unfortunately, however, if the effects are positive for some children but negative in others the regression slope may also be zero.

If one is willing to make some very detailed assumptions concerning the way the dynamical process works in individual cases (e.g., same starting time, same period for working out of consequences, stabilization of scores after the process works out, same strength of effect for all children, etc.) then the cross sectional regression slope in units of score change in, say educational expectations per unit change in IQ score, may also describe the effect parameter of the dynamical process. Even so, the regression slopes must be corrected for measurement error attenuation, as will be discussed below. This being the case, our data handling procedure has been to attach more importance to the significance probabilities, the asterisks, than to the numerical values of the regression coefficients.

A major source of upset to such inferences is thus seen to be the fact that the dynamical laws in one household are not those of another. Cues as to the child's IQ may be of very little importance in setting educational goals in some sub-cultures. Sometimes one can group the units into categories with internally similar causal regimes and separately estimate these. The separate analyses of the three basic sub-populations of this survey represents such an approach. Thus all relationships have been examined for urban blacks, rural blacks and Appalachian whites.

Another gap in inference from spatial associations to the temporal process is the direction of causality. The spatial pattern has no information on which variable leads the other in changing. Only common sense or experimental manipulation of variables can furnish judgements about causal priority to assist in converting spatial relationships to a picture of the time ordering of the events.

In order to be precise in describing these spatial relationships, it will be supposed that the expectation (over the various sources of uncertainty to be discussed below) of each dependent variable is a linear function of certain independent variables with the coefficients reflecting the extent and direction of dependence. The statistical techniques of multiple regression analysis will be used to obtain estimates of these coefficients and tests of their magnitude appropriate to their sampling uncertainty. Thus, the regression coefficients measuring the association between variables in the data from the 1,412 mother-child pairs obtained at roughly the same time will be used to infer the cause and effect relationships which are the principal targets of the study.

Inferring to the Population from the Sample

The other inferential leap is that from the 1,412 cases to a much larger number of child-mother pairs. Schools were located by the investigator's judgement so as to represent typically each of the three sub-populations of low income households. No obvious tension about desegregation or other political conflict could surround the school, and the area had to be fairly internal to its sub-cultural type.

Once the 28 schools had been selected, arrangements were made to administer the questionnaires to students in the fifth and sixth grades. The mothers were then contacted and interviewed as well. About 12% of the students were absent on the survey day, and an additional 9% had IQ scores sufficiently low to preclude the use of the pencil and paper type of measuring instrument. For 7% of the cases no mother was present and for 7% the enumerators could not locate the mother or she refused to be interviewed. Of the mothers contacted, it was found that 7% had been interviewed for another sibling and for 8% complete data were not obtained. Consequently, the number of completed cases was only 58% of all the students initially available in the schools. When the survey findings tend to demonstrate, as they do, that students from these sub-cultures are much like "upper middle class America", one should recall that about one-third of the possibly more recalcitrant part of the population may not be represented.

The narrowest population that our sample can be said to represent is the accessible 58% of student-mother pairs in those schools that meet the specific criteria of imbeddedness and cooperativeness described above, while the largest might be calculated from the statistics on numbers of families at low income levels in the South for those areas belonging to the three sub-populations. The selected schools seemed, to the investigators doing the selection, to be approximately as one in three possible schools in each sub-culture. From data on the number of families in low income levels in the South that population could number as many as 200,000, as will be discussed below.

The sample was drawn of schools and of children, but not of households or of families. This distinction becomes apparent when one attempts to compare the study families to census tabulations by families. For example, the average number of persons per family was 6.8 in the 1,412 cases of the study sample, while it is reported as 3.93 for families in 1968 at the poverty level (U. S. Bureau of the Census, 1970, p. 50). This is not a serious discrepancy, however, when one realizes that families having many children are more likely to be included in this sample. The U. S. Census Bureau report (1970, p. 51) also gave the number of families and their average size by the number of members less than 18 years, and from these data one can calculate that about 22% of these families would have a child in grades 5 or 6, while the average size would be 5.6 for such families. This probability calculation was done by supposing that the under-18 children are equally likely to be in any 1-year sector of the 18 but no two in the same year.

Tabulations by the sub-populations of the present study are not available, but that same U. S. Census Bureau publication (1970, p. 49) estimates 2,328 thousand families at the poverty level for the South region. Perhaps half of these (most of the 884 thousand Negro ones) would fit into one of the three sub-populations of the study definition. Of these, 22% would have a child in the fifth or sixth grade. This is where the figure of 200,000, cited above, arose.

Since no list of all possible schools was constructed and no table of random numbers was used to make the selection of schools for this study, the treatment of the data as a random sample is not as realistic as it could have been. However, it is of importance to recognize that the assignment of each sub-population to three states makes for a stratified sample, while taking all children in a number of given schools makes for a clustered sample. A stratified sample design usually leads to greater internal diversity than for a simple random sample, while clustering leads to the opposite. One could say that, in balance, the variance formulas for a simple random sample should thus be realistic. Therefore, the levels of significance computed using conventional regression theory assumptions will be taken as correct, subject to the appearance of the residuals as will be discussed below in the Regression Calculation section.

Inferring Results of Precise Measurements by Using Data from Imprecise Ones

The final source of uncertainty in the data is measurement error. Fortunately for the present survey there are some data that can be used to estimate reliabilities. Prior to the survey itself all states took part in pretesting the questionnaire. Most of the results were informal judgements on the ease of wording for items that were largely factual. In one state (Tennessee) there was, moreover, a test-retest investigation of the three Bronfenbrenner parent-behavior scales and the Elder academic motivation items. Although there were only 33 children in this study, there were boys and girls from two schools, and these four groups showed similar results. Reliability of the loving scale (LV) was estimated at .72, while the academic motivation scale reliability was .76. It was recognized that estimates of reliability using test-retest data are somewhat negatively biased, since some change may actually take place in the child, and so the levels attained were judged adequate for further use of the scales.

After the survey data had been collected, cards were punched by each state and sent to the computing center. There, allocations were made for scattered no-response or missing values so as to assign bona fide responses. The allocations or imputations used a mean value if the item was numerical or the modal category if it was categorical or the undecided, intermediate response for Likert-type items. The amount of non-response was very low for most items, well below 1% of the responses. There were, however, quite a few allocations to the questions on occupational expectations and aspirations because of non-response or, in the case of girls, for the "housewife" response. Since the allocations were to mean values and since the basic survey objective is to estimate the regression coefficients which reflect the extent of relationships, such a procedure will tend to bury the missing observations and not allow them to take part in showing any relationship.

In addition, an audit sub-sample of 35 questionnaires (5 from each state) was selected for re-coding and re-punching by a state other than the one doing the original coding and punching. The results of this audit showed discrepancies only in some non-essential coding decisions, such as alternative types of no response, and in some cases where brief calculations had to be made by the coder. Some of these involved household composition items, such as number of pre-school children, for which the coder had to search the list of household members. By comparing the occupational prestige score coded originally to the one given at recoding, the coding reliability was estimated at .95 for the child's level of occupational prestige expectations. For child's aspired level the agreement was even higher, while for the mothers there was no coding disagreement on aspired and only two small discrepancies on expected. Interestingly, the coding reliability for the prestige level of the father-husbands' actual occupation was less, namely .70. The more conventional calculations of reliability based on inter-item agreements will be discussed in the next section.

Validity and Reliability of the Variables

Knowledge of the students was obtained through group-administered pencil and paper questionnaires, while the mothers were interviewed personally in many cases, or in groups in others. There was no measurement based on direct observation of behavior nor was there opportunity for any extended probing or follow-up questioning to verify that the items as worded were always understood in the same way. Consequently, it would seem advisable to speculate on the meaningfulness (i.e., the validity) of the measurements that were obtained and to answer the reader's perhaps implicit concern over how such an artificial exercise as filling in a questionnaire can have very much to do with actual behavior.

It needs recalling that these fifth and sixth graders can be counted on, from the cultural expectations surrounding this age group, to take a classroom exercise with seriousness. Whether they interpreted the research activity as a test of their ability or as a way of fulfilling their school obligations, or both, they can be expected to answer honestly. From a narrow viewpoint it may appear unjust of researchers to take advantage of such naivete or to permit school administrators to furnish such an opening into the lives of their charges, but broader ethical judgement shows that this is a means of learning a great deal with a minimum of expense and upset of the subjects.

Both the mothers' and students' questionnaires, almost in their entireties, were put together from other research instruments (See section on Description of Instruments). This might seem a risky practice in view of the relatively young age and a typical ethnic and economic background of the subjects. On the other hand devising new instruments requires such a command of theoretical schema and such time delays in pretesting that it was not seriously considered. Thus, in assessing the meaningfulness of the variables, it is possible to trust to their known interpretations as recorded in the literature, as well as to describe their appearance and possibly unique manifestations in the present study population.

In subsequent papers dealing with the effects of the variables on one another, the presentation is organized around an ordering of the 23 study variables from dependent to independent or from derived to basic in a causal ordering. This is the ordering shown in Table 14 which gives acronyms and brief verbal descriptions of the variables (also Appendix C). Table 15 gives the averages of the 23 variables for the six study sub-groups and furnishes the case-to-case standard deviations along with the overall means.

Students (and their mothers) were asked what kind of job they wanted (for their offspring) and what job they would have when they grew up. The occupations they named were scored using the NORC scale of prestige scores (Reiss, 1963). The so-called OCC (MOC) score was calculated by averaging these two. Such scores are similar to those used by other researchers, or become so after conversion in accord with the formula:

$$\text{NORC} = 54 + (.317)\text{SES}, \qquad (1)$$

where SES is Duncan's socio-economic status score [used e.g., by Sewell, Haller, and Ohlendorf, 1970] and NORC is in the units of OCC in the present study. The formula was obtained by eye fitting to Figure 1 [p. 151 of Reiss, 1961] and is more faithful for the interior range of values. For Wisconsin high school seniors

TABLE 14. Acronyms and Brief Description of the Twenty-three Study Variables.*

Block	Variable No.	Acronym	Description
I	1	OCC	Mean of NORC score for child's aspired and expected occupation
	2	ED	Mean of coded levels of child's aspired and expected educational plans
II	3	AC	Child's composite score on Elder Achievement Motivation scale and school-liking portion of Weiner Achievement Motivation scale
III	4	MED	Mean of mother's aspired and expected levels of education for child
	5	MOC	Mean of mother's NORC score aspired and expected child's occupation
IV	6	SEL	Child's score on Lipsitt self-concept scale
V	7	FATK	Child's mentions of talking with father about job or school plans
	8	MOTK	Child's mentions of talking with mother about job or school plans
VI	9	COM	Child's report of mother's communication (Elder's modified independence training items)
	10	PU	Child's perception of punishing behavior by mother from BPB**
	11	DM	Child's perception of demanding behavior by mother from BPB**
	12	LV	Child's perception of loving behavior by mother from BPB**
VII	13	OUT	Mother's preference for child with outgoing traits, from Kohn's items
	14	CHA	Mother's preference for child with character traits, from Kohn's items
VIII	15	FST	Indicator of child being first born
	16	IQ	Otis-Lennon Mental Ability Test (1967) score
IX	17	ACV	Mother's achievement value score
	18	ANO	Indicator of Mother's anomia based on Srole items
	19	FBK	Composite of breadwinner's NORC score and mother's schooling and social participation

TABLE 14. Continued.

Block	Variable No.	Acronym	Description
X	20	HOZ	Number of persons in household
	21	NOH	Indicator of No husband in household
	22	WEL	Welfare status of household
	23	MOG	Mother's age

* Items of questionnaires making up each variable are listed in Appendix C.
** Bronfenbrenner Parent Behavior questionnaire.

TABLE 15 Subculture by Sex Means for Study Variables

Variable No.	Name	Sub-Group/a								F-values to test for		ALL
		AB	AG	UBB	UBG	RBB	RBG	RWB	RWG	SUB Diff/b	SEX Diff/c	Mean (St. Dev.)
1	OCC	66.7	70.8	70	73	66	70	66	70	15.9	68.5	68.8 ± 9.4
2	ED	5.60	5.73	6.0	6.2	5.6	5.7	5.4	5.5	27.5	3.9	5.67 ± 1.30
3	AC	39.3	41.2	39	40	41	42	38	41	54.2	69.4	40.2 ± 4.1
4	MED	5.53	5.52	5.6	5.6	5.5	5.6	5.6	5.4	1.1	0.0	5.53 ± 1.12
5	MOC	70.0	71.0	74	72	68	71	69	70	33.7	6.3	70.5 ± 7.2
6	SEL	66.0	68.3	67	70	67	69	65	67	11.7	19.4	67.2 ± 9.8
7	FATK	1.26	.95	1.2	.9	1.2	.9	1.3	1.0	4.2	53.0	1.11 ± .81
8	MOTK	1.48	1.63	1.6	1.7	1.5	1.6	1.4	1.6	5.6	20.9	1.55 ± .62
9	COM	3.43	3.56	3.4	3.4	3.1	3.2	3.7	4.0	39.3	3.2	3.50 ± 1.23
10	PU	32.6	31.4	33	31	34	34	31	29	18.8	5.8	32.0 ± 9.9
11	DM	51.3	52.9	53	54	52	53	50	52	12.4	17.0	52.1 ± 7.7
12	LV	55.6	67.4	66	68	65	66	66	68	8.4	20.5	66.5 ± 7.4
13	CHA	1.11	1.09	1.2	1.1	.8	.9	1.3	1.2	38.4	0.3	1.10 ± .74
14	OUT	.89	.85	.9	.7	.9	.8	.9	.9	4.3	1.7	.87 ± .66
15	FST	.28	.28	.21	.29	.23	.19	.37	.36	16.7	0.0	.283 ± .445
16	IQ	86.7	88.1	88	89	79	79	92	95	261	5.9	87.4 ± 10.3
17	ACV	25.7	25.4	28	27	23	24	26	26	76.6	1.2	25.5 ± 4.5
18	ANO	.61	.62	.49	.55	.65	.66	.66	.64	10.6	0.2	.619 ± .460
19	FBK	131	128	143	139	120	119	132	129	112	4.9	129.5 ± 20.8

TABLE 15. Continued.

Variable No.	Name	Sub-Group/a								F-values to test for		
		AB	AG	UBB	UBG	RBB	RBG	RWB	RWG	SUB Diff/b	SEX Diff/c	ALL Mean (St. Dev.)
20	HOZ	6.8	6.8	6.8	6.6	8.0	8.3	5.8	5.7	146	0.0	6.81 ± 2.30
21	NOH	.17	.20	.27	.35	.23	.22	.06	.09	43.4	1.9	.185 ± .377
22	WEL	.31	.46	.36	.49	.24	.45	.34	.45	0.9	9.1	.382 ± .905
23	MOG	39	39	38	38	40	40	38	38	9.2	0.0	38.5 ± 7.5)

/a AB = All boys, AG = All Girls, UBB = Urban black boys, UBG = Urban black girls, RBB = Rural black boys, RBG = Rural black girls, RWB = Rural white boys, RWG = Rural white girls.

/b If there are no differences among sub-cultures this F statistic would exceed 4.6 1% of the time and 7.6 .05% of the time.

/c If there is no boy-girl difference in means this F statistic would exceed 6.7 1% of the time and 12.2 .05% of the time.

in 1957 the average OCC score would be 67 (converted from the 40.429 given in Sewell, et. al.) while the present survey showed an average of 67 for all of these fifth and sixth grade boys in 1968. Some distributions of OCC scores are shown in Figure 1, for boys and girls of the present study and for heads of households in a 1/100,000 sample of U. S. 1960 census returns. Again the similarity between the distribution of OCC scores and the actual U. S. distribution of such scores is striking. Although these boys may individually be far from correct in their anticipations, as a group they match the realities of the existing occupational prestige distribution.

The distribution of girls' OCC scores in Figure 1 is greatly affected by the large number of "teacher" responses, having an OCC score of 78. The list of frequently named occupations appears as Table in Chapter III. Mothers of boys did mention fireman-policemen, athlete, and race driver only infrequently, but gave engineer, lawyer, office worker and scientist several mentions. Mothers of girls showed a choice of occupations very similar to their daughters.

These data on comparisons, distributions and named occupations show no obvious cause for mistrusting the OCC scores. In fact, moreover, the scores may be taken as reflecting a generalized attitude toward mobility, an occupational status projection. Since the occupational prestige ranking has been found to be fairly well understood even by grade school children (Simmons and Rosenberg, 1971, p. 237), it is supposed that a student who chooses an occupation with low OCC score thereby expects not to be too disappointed through lack of ability nor to have to expend too much effort to maintain his job, while a student choosing a high ranking occupation may well have confidence in his ability and willingness to spend the effort to attain and hold the job. Later tabulations will be found to bear out these suspicions by showing significant relationships of certain other variables with OCC. Nevertheless it would have been most helpful if some retesting had been done, after a month or six months had passed, so as to assess the temporal fluctuations in OCC scores.

Students were asked about their educational plans in parallel fashion to their occupational ones. Again, as with OCC, the average of aspired and expected responses defines the so-called ED scores. The ED score distribution as shown in Figure 2 tends to have quite negative skewedness. In earlier studies (Southern Cooperative Series, 1965 and 1968), a response "professional study" was provided in addition to the "finish college" response of this study, but this was omitted from the present questionnaire. There is also considerable discrepancy between the distribution of educational attainment for the U. S. population of 1960 as well as for that of 1970 as shown also in Figure 2, and the distribution of ED scores. The advance of the 1970 educational attainment distribution over the 1960 level by no means suggests that these aspired and expected ED scores of the study youth can be realistic. They are however consistent with levels recorded in earlier studies whose distributions are shown in Figure 3.

Both the preponderance of "teacher" response as an aspired occupation and the high levels of ED, point to some possible pro-educational bias engendered into the ED scores by the interviewing situation. Since the major goals of the study are to learn about relationships among variables rather than be concerned with their absolute levels, such a bias is not detrimental in itself. However, it suggests that schools may differ in calling out this bias and consequently

p. 68 blank

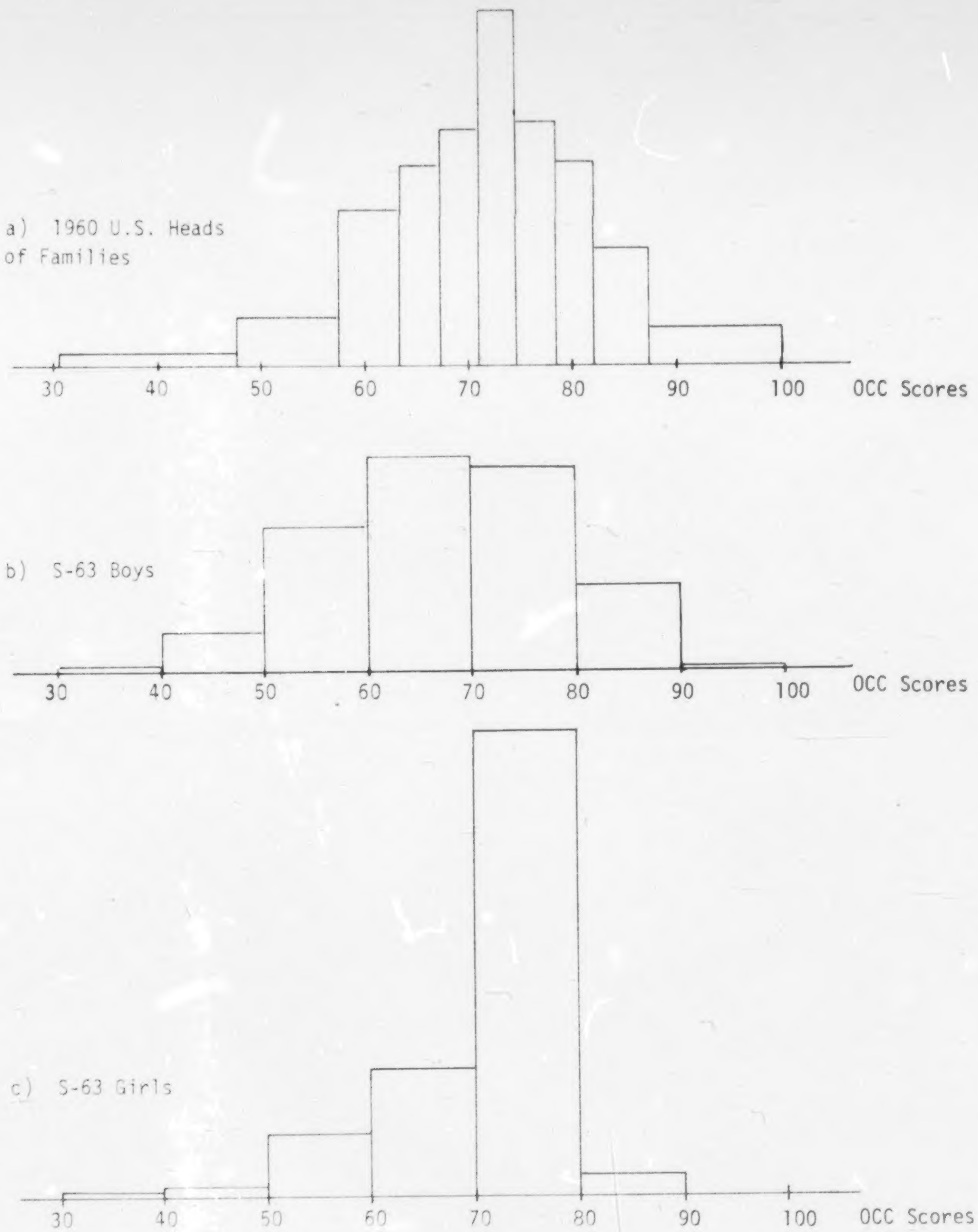

Figure 1. Occupational prestige score distributions for a) 1960 U.S. family heads, b) S-63 boys and c) S-63 girls.

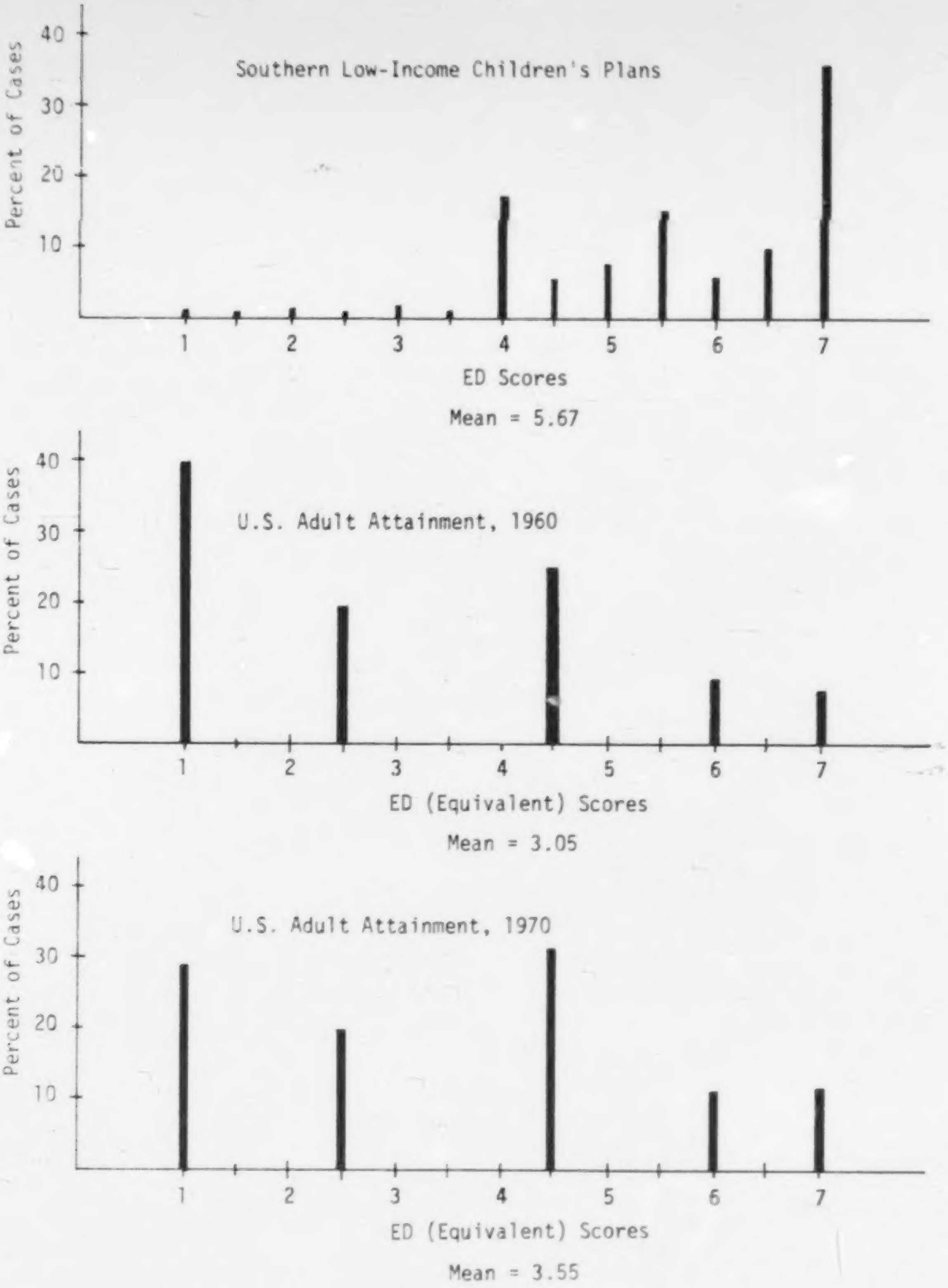

Figure 2. Distributions of educational scores for children compared to attained levels of education in U.S. population of 25 years or older in 1960 and 1970.

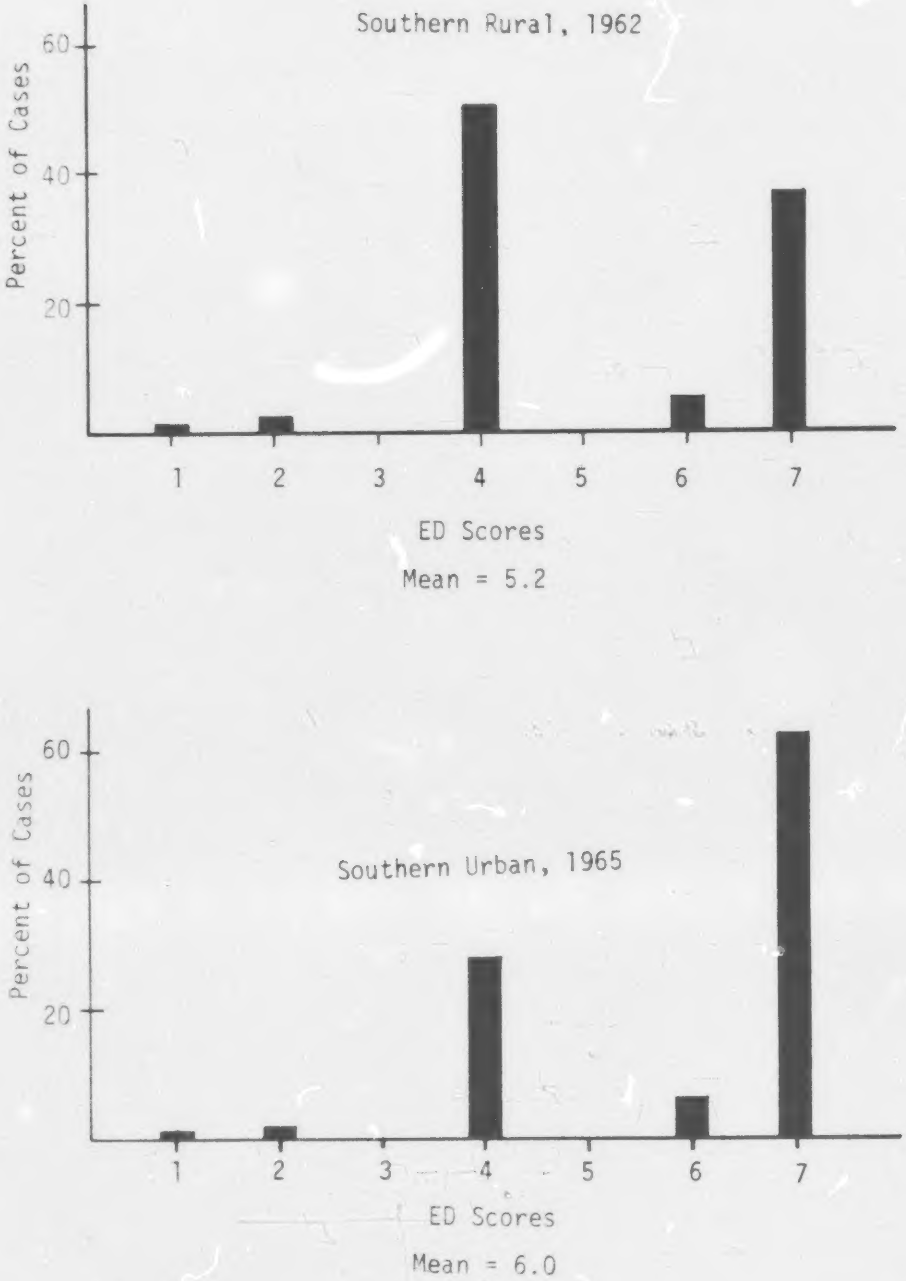

Figure 3. Distributions of level of aspired education by the southern study populations of youth.

it may be wise to remove such school differences from all variables before examining their relationships. This was done as will be discussed below.

The following variables were scored by giving numerical scores to item responses and then adding these over the set of items belonging to that variable:

AC, Academic liking (10 items on Child's questionnaire, "Survey of Student Plans for Work and School", Baseline Phase, Appendix A.)

SEL, Self esteem (21 items on Child's questionnaire),

COM, Mother explains (5 items on Child's questionnaire),

PU, Mother is punishing to me (12 items on Child's questionnaire),

DM, Mother is demanding to me (14 items on Child's questionnaire),

LV, Mother is loving to me (15 items on Child's questionnaire), and

ACV, Mother achievement values (8 items on Mother's questionnaire, "Mother's Survey of Occupational and Educational Goals for Children," Baseline Phase, Appendix B.).

Such a simplistic scoring procedure was certified as correct if, when the variable's items were factor analyzed, all loaded above .50 on the first principal axis factor in almost all six study groups. The factor analysis computer output often indicated more than one factor with a latent root above 1.00, but only one case showed up where a second factor was recognizable in all or nearly all subgroups.

This occurred with the original set of 18 Loving items from the BPB. The items were constructed (Siegelman, 1965) to be similar in sets of three, and one sub-sub-scale (called "Lb") contained the items:

> I can talk her into most anything,
>
> She lets me off easy when I am bad, and
>
> She finds it hard to punish me.

These three items formed a second factor in most groups, particularily for the rural whites. Thus the loving variable as measured in this study does not include "indulgence", which seemed, at least for this study population, to be a distinct characteristic from loving. Future studies as well as the interpretation of the present one would be well advised to heed this distinction between permissiveness and loving.

The factor analysis output also allowed a quick determination of reliability for each of these variables. The formula used was:

$$\text{Reliability, } r_{xx} = \frac{K(D-1)}{(K-1)D}, \qquad (2)$$

where K is the number of items and D is the largest latent root of the inter-item correlation matrix. The formula (2) stems from the Spearman-Brown prophecy formula, namely:

$$(3) \qquad r_{xx} = K\bar{r}_{ii} / [1 + (K-1)\bar{r}_{ii}] \; ,$$

where $\bar{r}_{ii}$ is the common intercorrelation of any two items, along with the formula for the largest root of a matrix with $\bar{r}_{ii}$ in off-diagonal places and ones on the diagonal, namely:

$$(4) \qquad D = 1 + (K-1)\bar{r}_{ii} \; .$$

Substituting for $\bar{r}_{ii}$ in (3) by using (4) gives (2). Although in no actual case were all inter-item correlations equal to a single value, the formula (2) is still a reasonable approximation as was found by making a more complicated calculation in a few cases. The reliabilities turned out as:

.74 for AC, .88 for SEL, .49 for COM, .81 for PU,

.75 for DM, .81 for LV, and .81 for ACV.

There is nothing intrinsically wrong about working with a variable having low reliability, such as COM at .49. It is perhaps wasteful of respondents' time and of computing time relative to other more precisely determined variables, however it is better than having nothing. The estimates of the size of effects are always biased downward when using such variables so that some correction for attenuation is in order (as described in Cochran, 1970). Also, if no significant differences are found, one cannot so easily dismiss the variable from consideration but must grant that an improved score might have shown some.

The Figures 4, 5, 6 and 7 show the distributions of AC, SEL, COM and ACV L. S. suggest and exhibit the slight negative skewness already familiar from OCC. The distributions for LV, DM and PU were very close to the normal frequency distribution and are not shown. The histogram of all 1412 Otis IQ scores is given in Figure 8. There are subgroup differences in IQ level as Table 15 exhibits. Besides the, by now, rather familiar White-Black difference in the urban area, it is interesting to note from Table 15 that the urban-rural difference among the Blacks is even greater. In our interpretations for this study, a high or low IQ score is deemed to indicate a likelihood of doing school work and clerical kinds of tasks at a high or low level of performance, culturally defined. It is assumed also that differences in measured IQ are associated with different impressions given by the children to their mothers, teachers and others in these areas of mental tasks.

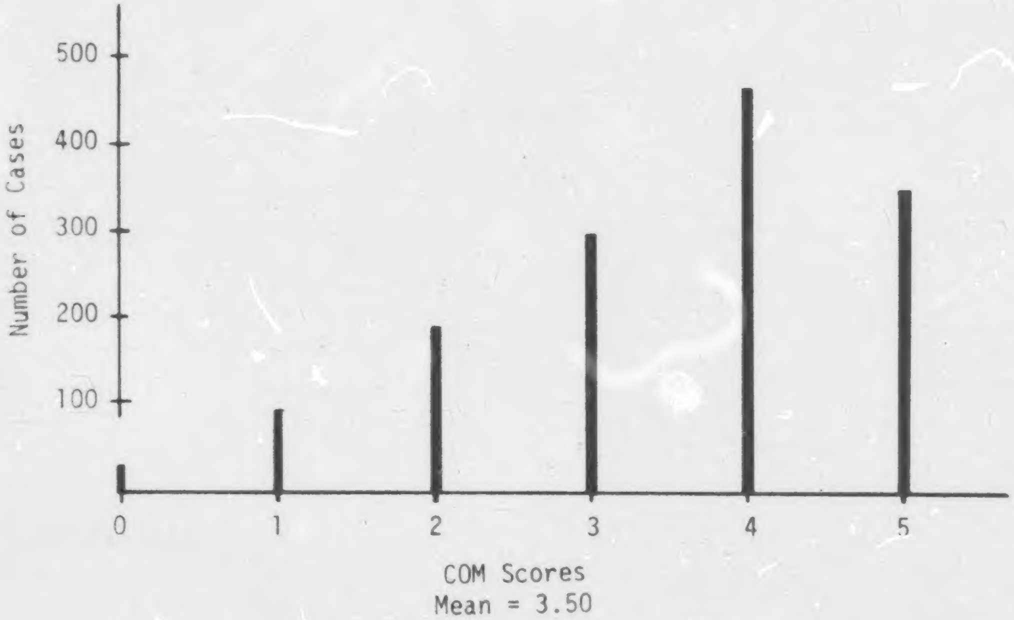

Figure 4. Spike distribution of mother's communication to child scores.

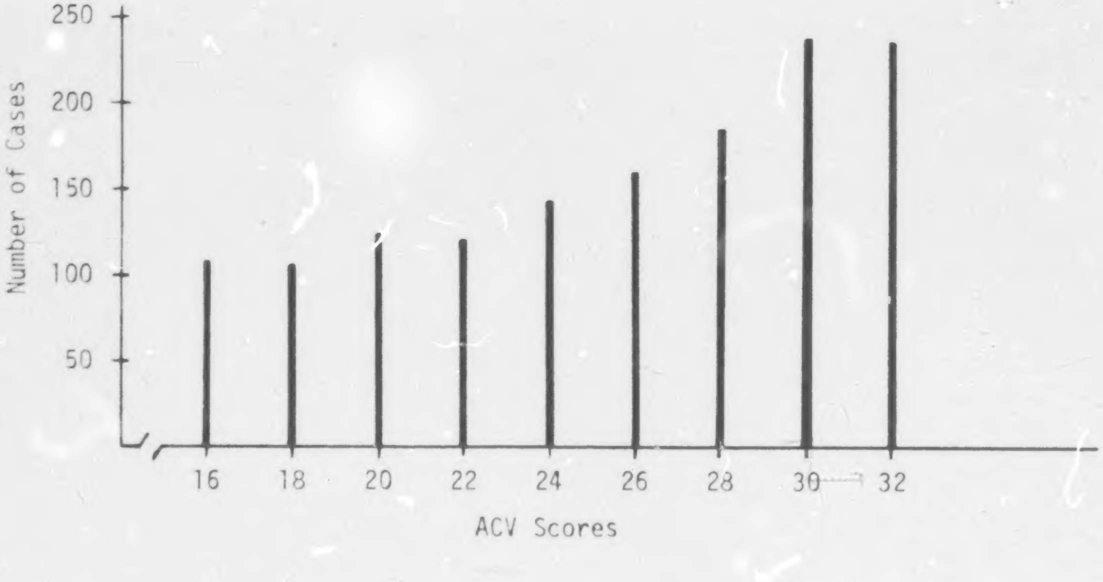

Figure 5. Spike distribution of mother's achievement values scores.

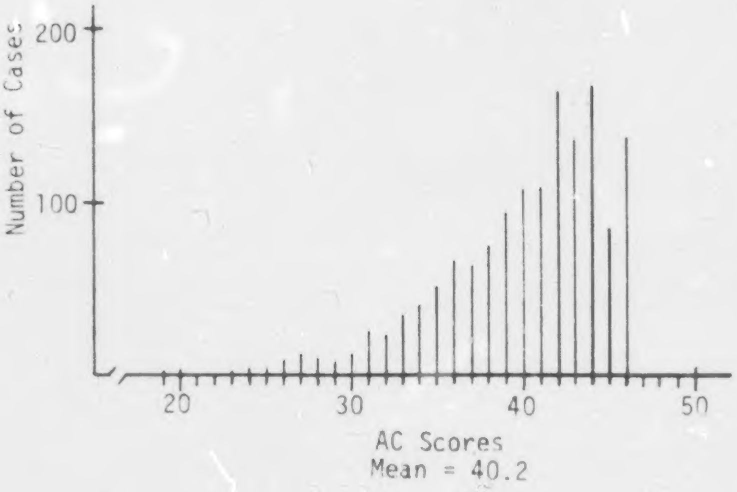

Figure 6. Spike distribution of child's academic liking scores.

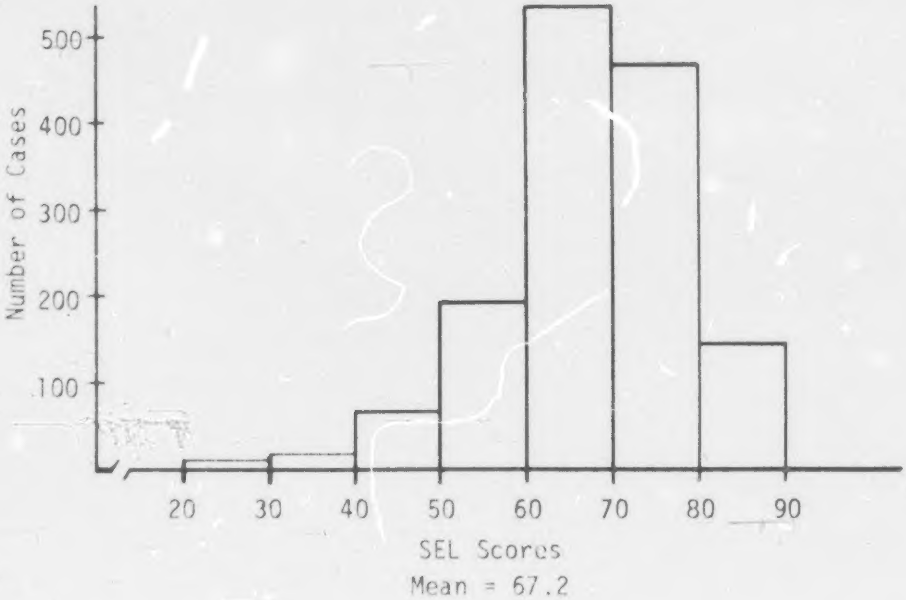

Figure 7. Histogram of child's self-esteem scores.

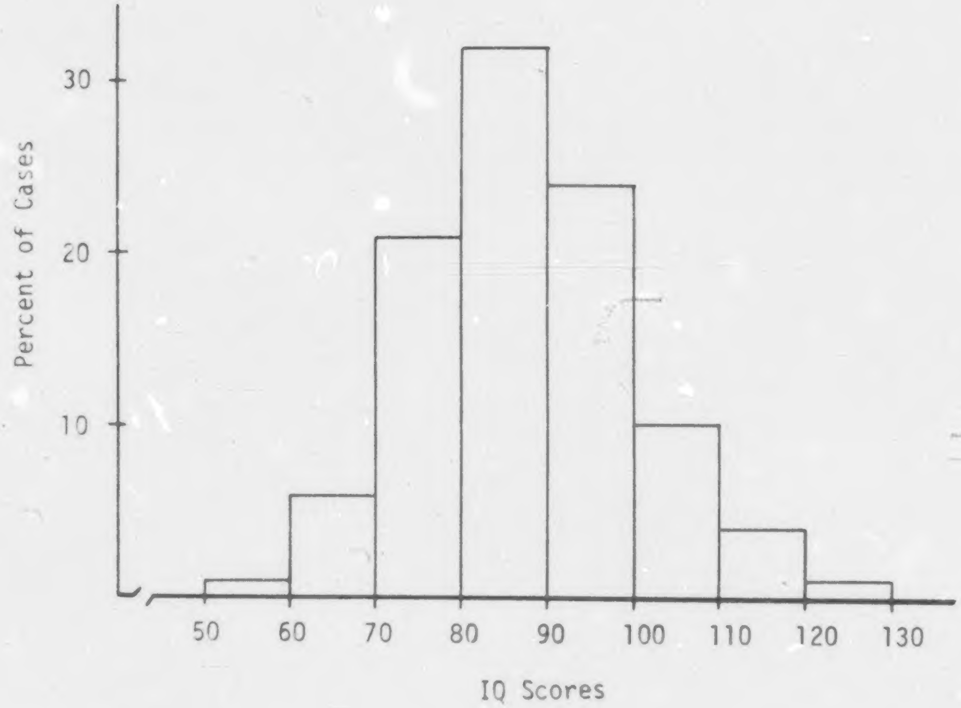

Figure 8. Histogram of Otis-Lennon IQ scores for the study children.

The two variables OUT and CHA emerged from a factor analysis of sixteen items on the mother's questionnaire. These zero-one item scores had the unusual feature that their sum over the 16 items was zero for each mother. This is because she was asked to pick three characteristics from 16 that she wanted her child to have. It was remarkable with so much negative correlation that factors could be extracted, but the groupings of items appeared to be sensibly distinguished into three as follows:

Outgoing - get along well with other children, affectionate, happy, etc.
Character - tries to succeed, defend himself, self-control, etc.
Polish - good manners, neat and clean, is liked by adults, etc.

To avoid singularity in the regression analyses it was necessary to delete one of these, and POL(ish) was left out. Thus in interpreting the scores of OUT and CHA, one must remember they reflect emphases relative to POL. The distributions of OUT and CHA appear in Figure 9.

The anomie scores were computed from the mother's responses to the five Srole items. The response patterns could have formed a Guttman scale, but the actual data showed there were only two underlying types rather than a graded sequence. Consequently, if a mother endorsed three or more items in the anomic direction she was scored 1 and otherwise she received a zero score.

The remaining variables are all of a more factual, demographic nature. The variable FST, for "firstborn", was scored one if the child was an only child or the oldest and zero otherwise. The family background variable, FBK, was designed to represent social and economic status through a weighted (to equalize standard deviations) combination of NORC occupational scores for mother and father, educational level of parents and of the mother's participation as newspaper reader and TV news viewer, church attender, registered voter, and organization member. The distribution is shown as Figure 10. There are considerable sub-cultural differences in FBK (see Table 15),as would be expected and it is important to remember again that school means were subtracted, so that these differences will not affect the regression results.

The two scores FATK and MOTK were scored from the child's responses when asked with whom he had discussed job plans and education plans. The scores were zero with no reports, one if he had talked either about job or about education, and two if the child reported both kinds of topics discussed. The distributions appear separately for boys and girls in Figure 11.

The distribution of household sizes differs quite considerably among the sub-cultures, as Table 15 shows, and is also at a rather high level. The reason for the large households in the study is, in great measure, a result of the method of sample selection. The child is the sampling unit; thus a household with many children has a greater chance of being included in the study than do smaller sized households. The distribution is shown in Figure 12.

If there was no father included in the household then the variable NOH, no husband indicator, was scored one - and zero otherwise. The incidence of NOH differed rather drastically among the sub-cultures, being principally a Black-White difference, as Table 15 shows. A score made up by adding one for every mention of government welfare, unemployment compensation or private relief as a

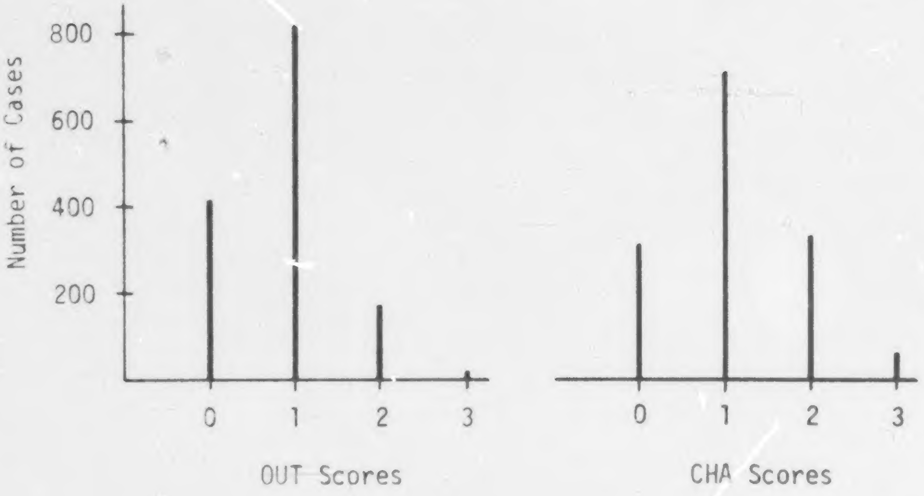

Figure 9: Spike distributions of OUT and CHA scores.

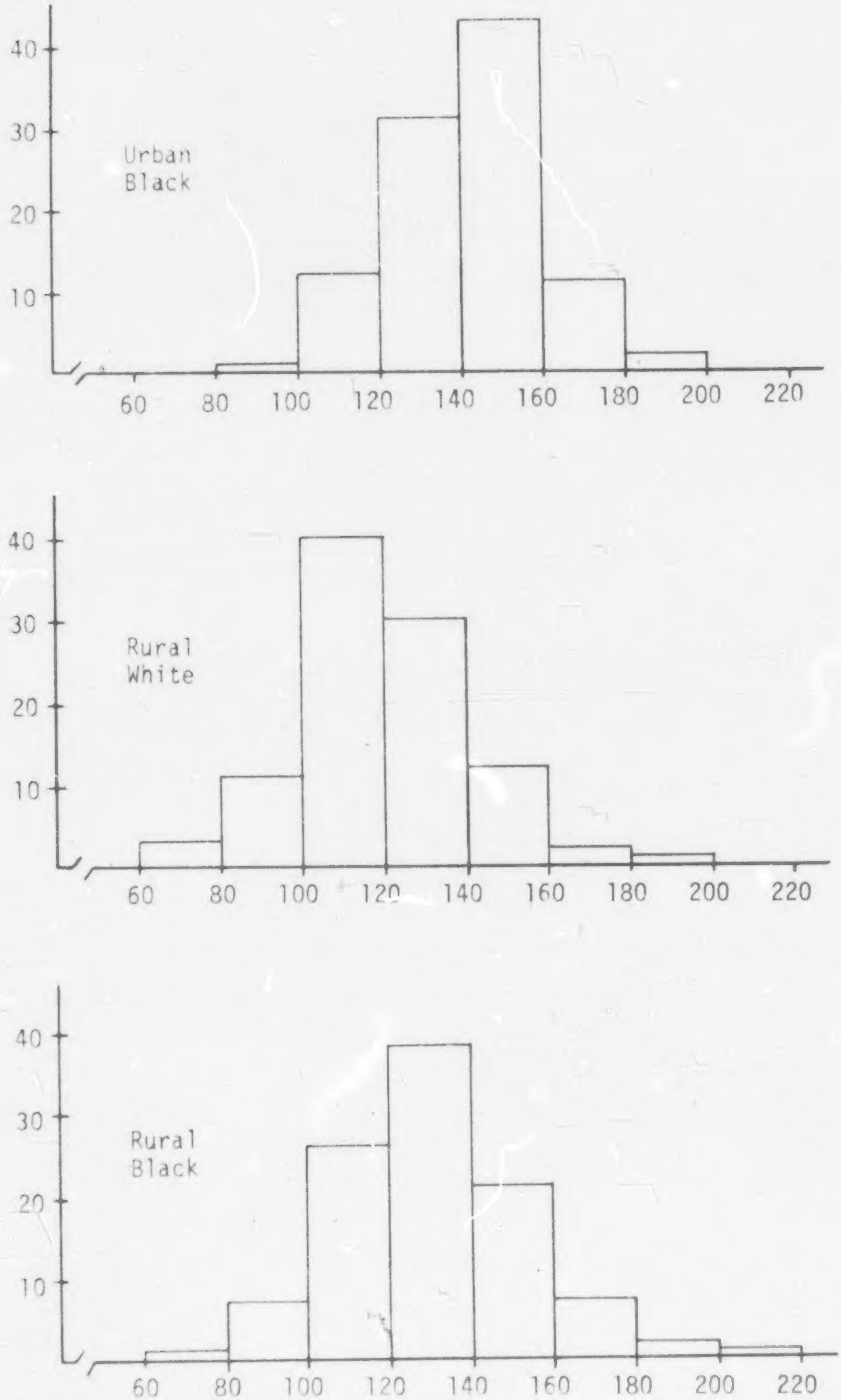

Figure 10. Histogram of the family background scores by subculture.

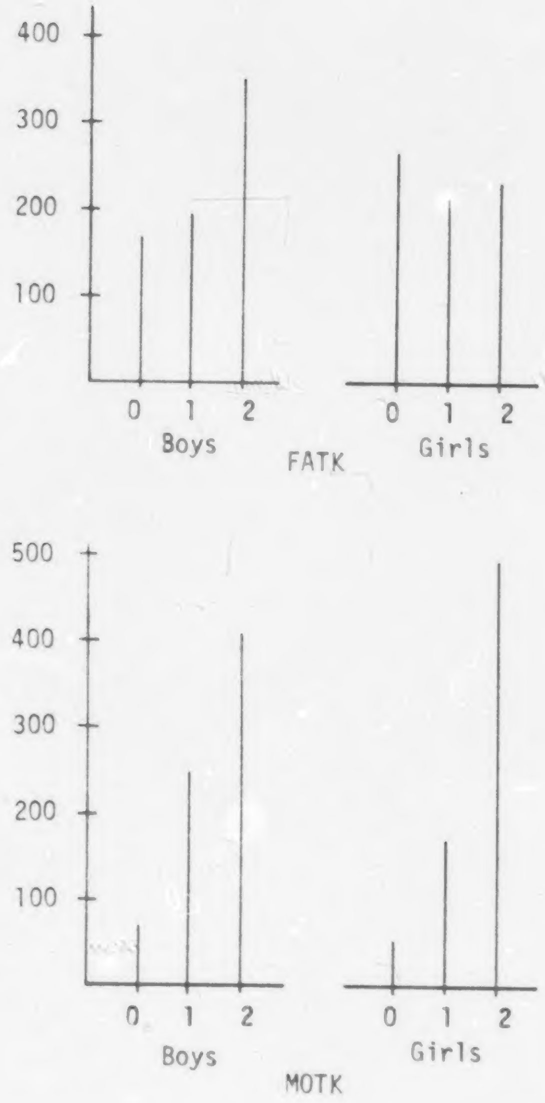

Figure 11. Spike diagrams of FATK and MOTK distributions for boys and girls.

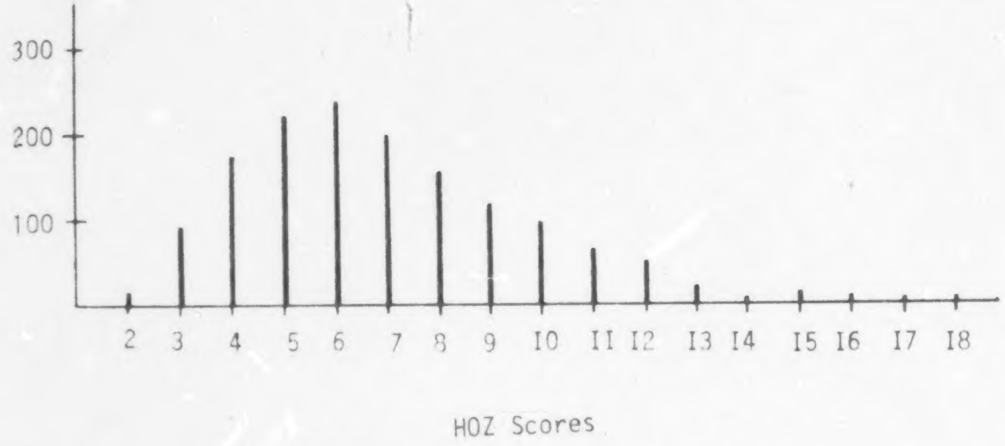

Figure 12. Spike distribution of household size of study children.

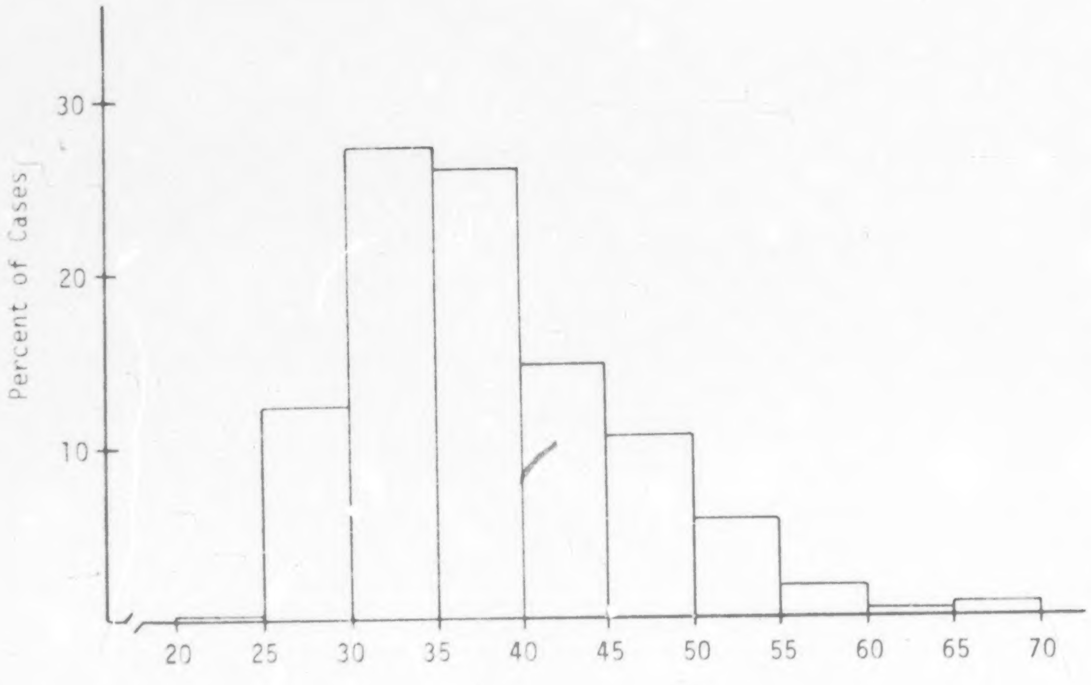

Figure 13. Histogram of mother's age distribution.

source of income is called WEL, and it shows almost no sub-cultural difference, although there is a slight, and unexplainable, tendency to be greater in the girl-child families than the boy-child ones.

The mother's age distribution was found to be very similar across all sub-groups and appears as Figure 13. These last variables, HOZ, NOH, WEL and MOG, have reliabilities that will be quite high insofar as the questions are of a factual nature, but no re-interviewing was done to verify this.

Regression Calculation Technology

The computed standardized regression coefficient, say b_{YX}, of variable Y on variable X, is an estimate of the proportion of a standard deviation change one would expect to observe in Y when going from one case to another where the corresponding change in level of X is one standard deviation. Since most tables will show b-values in hundredths, they are thus expressed in percents of standard deviation change. Notice that the movement from "one case to another" is not temporal. Recall that a non-zero population coefficient, say B_{YX}, only indicates that there is some temporal casuality, but is not directly an estimate of any parameter of the dynamic process. For this reason, more attention will be given to levels of significance than the numerical values themselves.

As mentioned previously, the regression calculations were produced in ten runs in accord with the ten blocks shown in Table 14. The first run cast OCC and ED in the role of dependent variables and all other variables as independent. The second run placed AC, OCC and ED as dependent with all others as independent, and so on. Dummy variables for school differences were always present among the independent variables so that the tenth run had all variables listed in Table 1 as dependent with schools as independent. An eleventh run was made to give unadjusted correlation coefficients among the 23 study variables.

For each run, estimates were computed of the standardized regression coefficients for each dependent variable on each independent one, and then partial correlation coefficients were computed among the dependent variables after adjustment for the independent ones. All of these coefficients were used to test the hypothesis of nullity of the corresponding population coefficient and the significance levels at which these hypotheses can be rejected will be signalled by asterisks in the tables. These levels are all at a comparisonwise error rate, which means that 1% of tests will give significance at the 1% level even when the population coefficient is zero.

The sample was selected in roughly equal numbers from the three sub-populations, Urban Black, Rural Black, and Rural White, so as to permit sub-group comparisons. In addition, the processes of aspiration-expectation formation were suspected of differing sufficiently between boys and girls as to require separate calculations. Consequently, regression results were examined separately for six sub-groups.

The coefficients will be discussed systematically in later sections but a few general comments on interpretation may fit in here. For a main variable of interest, say OCC as No. 1, the pattern of influence from any independent variable, say SEL as No. 6, can be reconstructed from several coefficients, appearing at the various runs. The zero-order correlation for all boys between OCC and SEL is r(1,6) = .107 and is significant at the .005 level. After adjustment for school differences, the correlation becomes r(1,6:X) = .075, still significant at the .05 level. The Roman numeral represents the last block to be entered as dependent variables. Other coefficients are found as: r(1,6:IX) = .071, r(1,6:VIII) = .059, r(1,6:VII) = .045, r(1,6:VI) = .041, r(1,6:V) = -.008, r(1,6:IV) = -.007, b(1,6:III) = -.008, b(1,6:II) = -.007, b(1,6:I) = -.014.

Notice the rather drastic change from r(1,6:VI) = .041 to r(1,6:V) = -.008 in the sequence. This is to say that the partial correlation between OCC and SEL was reduced to zero by the introduction of an adjustment for LV, DM, PU and COM. The notation, for example, r(1,6:VI) refers to the partial correlation between variables X1 and X6 at the sixth run. The sixth run has variables in block VI as dependent as well as all variables in blocks I through V, while the other variables in blocks VII through X, as well as schools, are independent. In going from the sixth run to the fifth the variables of block VI change status from dependent to independent.

If one adopts the somewhat reified terminology that r(1,6:VI) = .041 "is" the relationship between SEL and OCC after adjusting for the effects of variables below block VI and r(1,6:V) = -.008 "is" that relationship after adjusting for those in block VI also, then the reduction is interpreted as evidence of spuriousness in that relationship due to both SEL and OCC being influenced by the four mother's rearing practices variables, LV, DM, PU and COM. Such interpretations will in fact be made particularly in Paper 5 but should be tempered by recognizing the serious gap between cross-sectional data and the temporal process that was already beem mentioned, perhaps too many times.

Another interesting pattern of change is a drop in b-value. This did not occur among the three b-values of the previous example. It did, however, happen with dependent variable No. 2, ED, and independent variable No. 16, IQ, between b(2,16:III) = .227 and b(2,16:II) = .187 for all boys. The decrease was due here to the introduction of MED and MOC, which would be interpreted as a reduction of direct casuality of IQ on ED due to mediation by the mothers' aspirations for her child.

If one in tracing along a sequence of partial correlation coefficients between a pair of variables as more and more independent variables are introduced and notices a rise in level (rather than a fall as in the example above) then the interpretation would be that the relationship had been "unmasked" by the partialling out of those last independent variables. Likewise, if a rise be noted in a sequence of b-values the interpretation would be that the influence of the independent on the dependent variable was enhanced by adjusting for the last independent variables. Needless to say, such interpretations must be taken with a great grain of salt.

In addition there is the issue of how large a drop or rise in r-value or b-value will be permitted to draw comment. There is need for a test of significance here and one is not known, from the literature with which we are acquainted. Under assumptions of jointly normal distributions of all variables there is considerable positive covariance between adjacent b-values or r-values in such sequences as are being considered. After some numerical experimentation with approximate variance formulas for a variety of levels of correlation when only 3 variables were considered, it seemed that the variance of a difference between adjacent r-value would be about .8 of the variance of an individual value. This result allowed procedures for detecting "significant" changes along the sequence to be designed and they are applied, particularly in Paper 6, where they are designated as tests of elaboration.

After the lengthy discussion of the three sources of uncertainty in inferring from the appearance of the sample data to those of the population it may seem superfluous to discuss now the use of tests of hypotheses and levels of significance. It is, however, worth mentioning that examination of residuals did show some cases of negative skewness, although not enough to upset the significance levels to any extent since they are two-tailed. No evidence of heterogeneity of variance related to fitted values was found. School differences were treated, as mentioned already, as block effects and removed. However, no test for school-with-other-variable interactions was made. Finding such would invalidate many of the calculations of significance levels.

A further question is whether the coefficients for the sub-groups differ. Homogeneity tests were applied to the 233 sets of three standardized coefficients for boys and for girls (See Appendix I). The tests led to rejection of the homogeneity hypothesis at the 5% level in 14 sets for the boys and in 18 sets for girls. This is scarcely more than would be expected by chance. Although patterns of association within groups may be of interest, it would seem that the sub-group differences in individual regression coefficients may be disregarded in most cases.

In addition to r-values (partial correlation coefficients) and b-values (standardized partial regression coefficients) some of the interpretations in later papers are based on more global indexes of relationship based on sums of squared residuals. Computer output from the multiple regression analysis program (called "SAS", and described by Jolayne Service, 1972) included many sums of squares attributable to independent variables and these can be used in computing quantities usually denoted "proportion of variance due to ...". For example, in Paper 9 the quantity, proportion of variance in OCC due to both MED and MOC, is obtained from the sequential regression sums of squares for OCC. The denominator is the sum of squares for all 20 independent variables from HOZ to MOC, while the numerator is the sum of just the two for MED and MOC. Notice that the sum of squares due to schools has been put aside in both sums. In order to test for significance of differences by sub-culture among such complex quantities it was necessary to break up the sample into pseudo-replicates and apply the Tukey Jackknife method (F. Mosteller and J. W. Tukey, 1968).

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CHAPTER VI

FINDINGS FOR THE BASELINE STUDY

Paper 1...Influences on the Child's Occupational Educational Status Projections

Introduction

In this paper the relative influence of the independent variables on the child's occupational and educational status projections is examined for all boys and girls, also noting some racial-residential differences.[1] This objective is congruent with two recent trends in aspiration research. First, as research on mobility and achievement orientations has accumulated, research efforts have become increasingly analytical rather than descriptive. Secondly, an increased attention to social psychological variables has resulted. These two interrelated trends represent an attempt to ascertain the processes underlying status orientations (see Haller and Portes, 1973).

Ascertaining this process necessitates the examination of the relative influence of variables intervening between antecedents such as family background, family structure, and measured intelligence and the dependent status projections. This need is supported by an emerging body of literature which suggests that while social class and measured intelligence have traditionally been shown to have positive correlation with occupational and educational status projections (Haller and Miller, 1967; Kuvlesky, 1969), there is ample reason to question direct relationships. That is, the relationships between antecedent variables and status projections have been explained, in part, by social psychological factors such as parental encouragement and parent-child relations (Kandel and Lesser, 1969; Rehberg, Schafer, and Sinclair, 1970; Sewell and Shah, 1968). These findings raise a question about the nature of stratification as a major source of variation in achievement values and call for more attention to additional intervening variables.

Numerous studies of youths' educational and occupational projections have been concerned with the association of social psychological variables such as parental encouragement and aspirations (Kandel and Lesser, 1969), motivation to achieve (Brim, 1965; Rosen and D'Andrade, 1959), and self-concept (Brim, 1965; Herriott, 1963; Slocum, 1958). Only recently, however, has there been much concerted effort to examine such social psychological factors together as an important cluster of intervening variables. For example, Sewell, Haller and

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[1] There is a commentary on the levels of occupational and educational status projections and their deflection in Appendix L.

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Ohlendorf (1970) have developed a complex model of the educational and occupational status attainment process. Congruent with a reference group perspective, it links socioeconomic status and measured intelligence with educational and occupational attainment by way of the influence of significant others as well as by way of educational and occupational aspirations. Also representative of the focus on intervening social psychological variables is Picou and his associates' (1972) examination of academic achievement orientation and significant others influence in a sequential model explaining education expectations.

In passing we would like to emphasize how important for this study the measure of occupational status projections is children's awareness of occupational prestige, their perception of the opportunity structure, and their social class self-identification. A recent study of black and white children from grades three through twelve reveals that as early as elementary school: (1) children rank occupations in an order almost identical to that of adults; (2) although children do not accept the doctrine of equality of opportunity for all, a majority of every age, race, and socioeconomic level are optimistic about their own personal opportunity; and (3) children, like adults, tend to select the middle class as their social locale (Simmons and Rosenberg, 1971). Occupational educational status projections are herein conceived as concepts from which cultural success values may be inferred (See Theoretical Perspective).

Procedure

A preliminary indication of the amount and type of influence of the independent variables on status projections can be ascertained by a comparison of three sets of correlation and regression coefficients. The first set, "schools adjusted," are correlation coefficients which have been adjusted only for the influence of school and thereby for state differences. The second set, "basic adjusted," are standardized partial regression coefficients which have been adjusted for the influence of preceding antecedent variables in the causal ordering of the independent variables (see Table 1 of Methodology). The final set, "fully adjusted," are standardized partial regression coefficients which have been adjusted for the influence of all other independent variables.

This procedure enables the assessment of first, the direct effects of the antecedents upon the dependent variable, as reflected in, the fully adjusted regression coefficients, having controlled for the effects of all other variables. The significant ones of these coefficients are to be taken as indicators of paths of influence. Secondly, indirect effects are suggested by a comparison of the basic adjusted and fully adjusted coefficients. For example, an examination of the influence of IQ on boy's occupational status projection (OCC) in Table 1 reveals a basic adjusted coefficient of 13 that is reduced to a fully adjusted coefficient of 7. This is a case where considerable indirect effect appears to have been mediated by variables intervening between IQ and OCC. Thirdly, the reduction that occurs in moving from schools adjusted correlation coefficients to basic adjusted regression coefficients constitutes grounds for inferring spuriousness. An example in Table 1.1 is the reduction of a coefficient of 18 between mother's educational status projection for her child and the child's OCC to 6 in the basic adjusted coefficient.

The sample sizes in Tables 1.1 and 1.2 are about 700 cases and thus the standard deviation of a sample correlation coefficient, when population correlation is low, is about $1/\sqrt{700} = .038$. As was mentioned in the Methodology Paper, a difference in successive coefficients can be taken to have a standard deviation of $\sqrt{.8}\,(.038) = .034$. Thus a drop of 6 hundredths in Table 1.1 or Table 1.2 provides grounds for comment concerning possible spuriousness or mediation.

Table 1.1. Influence of Independent Variables on Boy's Occupational Status Projection (OCC): Standardized Regression Coefficients in Hundredths

Block of Variables	Independent Variable	Schools Adjusted Correlation/a	Regression Run	Basic Adjusted Regression	Fully Adjusted Regression/b
II	AC	9*	I	2	2
III	MED	18**	II	6	6
	MOC	23**		17**	17**
IV	SEL	8*	III	- 1	- 1
V	FATK	2*	IV	- 4	- 4
	MOTK	13**		9*	9*
VI	COM	11*+	V	3	3
	PU	0		2	- 2
	DM	11**		8+	8+
	LV	11*+		4	2
VII	CHA	8*	VI	14**	13**
	OUT	10*+		15**	13**
VIII	FST	7	VII	7	6
	IQ	16**		13*+	7
IX	ACV	14**	VIII	9*	3
	ANO	-11*+		- 5	- 3
	FBK	14**		10*+	1
X	HOZ	- 8*	IX	- 8*	- 2
	NOH	0		- 0	0
	WEL	- 4		- 3	- 0
	MOG	1		1	6

Levels of Significance: ** = $P \leq .005$ *+ = $.006 \leq P \leq .01$
* = $.02 \leq P \leq .05$ + = $.06 \leq P \leq .10$

Levels of Significance: /a From Run X

/b From Run I

FINDINGS

Occupational Status Projections (OCC)

The influences upon the child's occupational status projection is an extremely complex field of phenomena which the tests of significance on Tables 1.1 and 1.2 and the tests of elaboration in Table 1.3 only crudely reflect. Nonetheless, the sizes of and reductions in the coefficients suggest some issues perhaps worthy of more exploration.

The boys' data is richer in relationships, yielding indications that 15 of the 21 independent variables "apparently" take part in setting levels of occupational achievement orientations. As shown in Table 1.3, however, only five variables persist in their relationships after adjustment for all other variables.

Table 1.2. Influence of Independent Variables on Girl's Occupational Status Projection (OCC): Standardized Regression Coefficients in Hundredths

Independent Variables	Schools Adjusted Correlation	Basic Adjusted Regression	Fully Adjusted Regression
AC	9*	4	4
MED	8*	- 1	- 1
MOC	18**	15**	15**
SEL	7+	6	4
FATK	9*	12**	12**
MOTK	- 1	- 7	- 6
COM	9*	7	6
PU	0	0	1
DM	4	1	- 0
LV	5	2	- 1
CHA	5	8+	8+
OUT	6+	8+	9*
FST	9*	11**	9*
IQ	11**	10*+	2
ACV	5	3	1
ANO	- 2	3	3
FBK	10*+	10*+	8
HOZ	- 1	0	6
NOH	4	5	10*
WEL	- 1	- 3	- 1
MOG	- 1	- 1	4

Levels of Significance: ** = P ≤ .005 *+ = .006 ≤ P ≤ .01

* = .02 ≤ P ≤ .05 + = .06 ≤ P ≤ .10

Table 1.3: Summary of Tests of Elaboration of the Influence of Independent Variables on Child's Occupational Status Projection (OCC) by Type of Effects

Boys			Girls		
Spuriousness	Mediation /a	Direct	Spuriousness	Mediation /a	Direct
AC	IQ (via MOC)	MOC	AC	IQ (via MOC, COM)	MOC
MED	ACV (via MOC, LV, MED)	MOTK	MED	(FBK and COM) /b	FATK
SEL		CHA			CHA
COM	FBK (via MOC, IQ, MED)	OUT			OUT
LV		DM			FST
-ANO	-HOZ (via FST, COM, MED)				NOH

/a The first listed variable is the antecedent or causal variable and the variables in parenthesis are the principal intervening variables, mediating most of the effect.

/b FBK and COM are in an anomalous causal status (see Table 1.2).

The variables with direct effects on the boys' OCC are mother's occupational status projection for her son (MOC), son reports mother as most influential on his occupational and educational future (MOTK), mother's desire for her son to have character (CHA) and to be out-going (OUT), and high performance expectations or a demanding (DM) child-rearing orientation of the mother. This is consistent with traditional literature which suggests that for youth, especially of lower social strata, upward mobility orientations are linked to maternal influence (Ellis and Lane, 1963).

Parent-child agreement is reflected in the fact that MOC is the primary variable with direct effect. However, the evidence of direct influence of MOTK is also quite important. This indicates that over and above the mother's aspirations, perhaps her accessibility to talk with her son about his future may be related to the son's occupational status projection. The variable MOTK was measured from the boy's responses, so its relationship to OCC may be artificially enhanced by the child's response biases. On the other hand there is additional evidence that the mother's attention to the son, over and above the specific concern with jobs, influences his score on OCC. This comes from the relationships, indicative of direct effect, of the demanding score (DM) on OCC. Again, DM was measured by the boy's responses, but a review of the DM items and of their reliability in the form of a total score suggests that some rather solid phenomena is being tapped.

The final two variables, OUT and CHA, showing direct effects on son's OCC score are notable in reflecting mother's orientations based on her own responses. The mother's preference for an image of an ideal son as being contented and outgoing and exhibiting quiet character is positively related to her son's status projections. The items omitted were those reflecting actual polished behavior (See Chapter IV for a discussion of the Kohn items). This suggests that those mothers who focus on such details of his behavior may depress their son's aspiration-expectations.

The prominence of OUT and CHA as direct effects over the more conventional measures of mother's orientations to upward mobility such as achievement values (ACV) and anomia (ANO), is due to the fact that when adjustment is made for differences in family background and in other aspects of mother's attitudes, then ACV and ANO appear to diminish in importance. This brings us to the other results shown in Table 1.3 concerning the remaining ten (15 minus 5) variables with relationships to boy's OCC scores.

The characterization of effects as spurious or mediated merely indicates a caution in asserting their importance. All 15 variables with asterisks in the Schools Adjusted column of Table 1.1 are suspected of having some influence in setting levels of occupational aspiration-expectations for boys. Certainly, the five with direct effects, as signalled on the Fully Adjusted column of Table 1.1, are important. The other ten may be, but their importance depends on how they enter into the causal dynamic processes at the household level and this cannot be known from tabulations based on cross-sectional data. It can be conjectured in part, using the possibilities suggested from the tests of elaboration in Table 1.3.

The variables that are suspected of spurious relationships are child's academic motivation (AC), mother's educational projection for child (MED), child's self-concept (SEL), child reports a loving mother (LV), child reports communicative mother (COM) and mother's anomia (ANO). This is to say, that when a prediction equation for OCC was computed in which the effects of variables prior to these in the causal chain were adjusted out, then the coefficients of these variables ended up near zero. This is quite reasonable for MED, for example, since its relationship to OCC can easily be explained as a tendency for mother's educational status projections for their sons to follow the prestige level of their occupational projections for him and from this relationship of MOC to OCC there will then appear to be a relationship between MED and OCC. After adjusting for MOC, this relationship was found to disappear. Actually, adjustment for AC, the child's interest in school, also reduces the influence of MED on OCC.

Such numerical results, suggest that to understand how boys arrive at their occupational status projections one need not be interested in the mothers' educational plans for them. It does not show that changing the mother's educational status projections can have no effect of the boys job aspirations; this would require considerable additional data. By common sense, one would expect there to be a causal link between MED and OCC. All we are saying is that in the normal course of events the level of MED seems to be set by considerations that also underly the setting of the level of OCC, but having an abnormal level of MED does not seem to call out any abnormally high or low level of OCC.

Returning to Table 1.3, there is also evidence for spuriousness in the effects of AC and SEL, variables reflecting attitudes of the boy suspected to be congenial to his status orientations, and in COM and LV, variables showing styles of mothering often conjectured as enhancing children's aspirations. Even the apparent effect of mother's anomia can be explained as due to characteristics of the household that effect both OCC and ANO. These findings, particularly that for SEL and AC, tend to dispute theories explaining the origin of occupational status projections in personality characteristics supportive of status strivings. For children of this age and sub-cultural background, such apparent correlations can be explained away by the presence of more basic common causes.

The final four determinants of OCC, namely IQ, ACV, FBK and HOZ, do appear to be important but their influence may also be transmitted via other pathways. The possible pathways are also listed in Table 1.3. For example, the effect of a crucial variable such as IQ on OCC may be explainable as having first an effect on MOC (high or low IQ causing the mother to raise or lower her projections) and then the boost or depression thus suffered by MOC acts on the boy himself. The fact that the fully adjusted coefficient of OCC on IQ is 7 (see Table 1.1) and is thus almost significant should deter us from concluding that there is no direct effect of IQ although we cannot assert that there is. We are left, however, with the impression that the boys' occupational status projections are not closely tied to their IQ.

The next two variables ACV, mother's achievement motivation, and FBK, the socio-economic status dimension, show a similar pattern of mediated effects through MOC and MED, as would be expected since the mother's projections (MOC and MED) reflect her own attitudes and status. Likewise, the mediation of IQ in the FBK-to-OCC relationship is reasonable, particularly if one tends to ascribe causal determinance to family status in fixing IQ level as would be consistent with the viewpoint that the IQ test is a culture-bound measuring instrument. Finally, the presence of the loving score as a mediating pathway from ACV to OCC is a bit perplexing, but only until it is discovered that three other variables, namely CHA, DM and IQ, can also be said to intervene between ACV and OCC. The following discussion describes how such discoveries were made.

Elevation of a variable to the category of a mediating pathway depended on the following calculation that can be exemplified for the boys ACV to OCC effect. There are 14 variables following ACV in the causal ordering and for each one there is a prediction equation with ACV as an independent variable having some partial regression coefficient, while there is also a partial correlation coefficient of that variable with OCC. The product of these two coefficients is taken to reflect the amount of mediation contributed by the variable. For example, in predicting LV the standardized partial regression coefficient for ACV was .1527 and the partial correlation coefficient between LV and OCC was .0925 so the mediation index for LV is .0141. Using hundreths, the index is 15 x 9 = 135. The mediation indexes for MOC, MED, CHA, DM and IQ are computed similarly as 136, 126, 102, 99 and 99, respectively. Thus one sees that mother's achievement strivings do seem to work their way through her demanding style of child rearing, but also they seem to pop up in her loving approach as well as in her vision of an ideal son as one having character.

For girls, the main variable with a direct effect on OCC is, as was the case for boys, the parallel measure for the mother, MOC (see Table 1.2). However, the role of the father's influence comes into play with FATK, rather than MOTK, being a significant source of influence on girl's OCC. This finding is consistent with the contention that "the effect of parental intervention in the development of the child's achievement orientations is more frequently visible in the parent of the opposite sex" (Katrovsky, Preston, and Krandall, 1964). In view of father's influence on daughter's OCC it is curious to find that absence of husband (NOH) has a positive direct effect that may be conjectured as a mobility orientation "to compensate the consequences of structural incompleteness" (Kriesberg, 1967). Another curious finding is the relative lack of indirect effects, except that of IQ, by way of MOC, as usual, and also by way of COM. The role of COM suggests that the mother's openness and supportiveness in communications with her daughter may raise the daughter's OCC, despite the fact that MOTK seems even to depress OCC or at least to be negatively related to OCC. This seemingly contradictory influence of similar variables is quite consistent with the contention that the quality of parent-child interaction, rather than the quantity of interaction, influences the child's aspiration (Furstenberg, 1971).

The subcultural differences in direct effects are relatively few (see tests of homogeniety, Appendix I[illegible]). In table 1.4 note that household size (HOZ) has a depressing effect only on the urban black boys, MOTK has a positive influence only on the urban black girls, and only-child or first sibling (FST) has a positive influence on rural white girls' OCC. To a less extent ($P < .10$) the urban black girls are also distinguished by a positive influence of IQ, ANO, and NOH on their occupational projections.

In several respects the urban black girls show some exceptional paths of direct influence on their occupational achievement orientations. The overall coefficient of determination, R^2, is largest, surprisingly enough, for them. IQ is prominent and possibly reflects a rationalistic emphasis of the city as may also be true of FBK. The importance of a missing husband in the household, that was mentioned just above, is especially marked for the urban black girls. For some strange reason the mother's attitudes of anomie are mirrored there in raised, rather than lowered, occupational orientations of the daughter. References to discussions with the mother about jobs leads to higher aspirations for the urban black girls but lower OCC scores for the other rural girls. Being an only child, or firstborn depresses OCC in the city, but does quite the opposite for rural girls. These results leave the impression that the upwardly mobile urban black girl is from within a large number of other siblings and is influenced by conversation with her rather cynical mother, while her rural white counterpart tends to be the eldest of a number of siblings and is relatively uninfluenced by her mother.

Educational Status Projection (ED)

It is perhaps instructive as we turn from OCC to ED to examine Table 1.8 and compare the R^2 values there, with the smaller ones of Table 1.4. The educational aspiration-expectation scores appear to reflect a dimension of status projections having more specific meaning for the individual, at least relative to the collection of explanatory variables included in this study, than the more generalized prestige dimension of OCC. Almost all of the study variables play some role in setting educational aspirations (see the first column of Tables 1.5 and 1.6) and this makes the analysis rather cumbersome. As before we begin with the boys.

In contrast with OCC the variables with direct effects on ED are more congruent with previous findings in the literature. Academic motivation (AC), mother's educational projections (MED), father's influence (FATK) and child's measured mental ability (IQ) persist as direct contributions to the boy's ED. The initial relationship between mother's occupational projection (OCC) and ED is found to be largely spurious, although some direct effect of MOC seems to remain.

Not only is ED influenced by the motivational and ability variables but it is also influenced by indirect effects of mother-child interaction and other family variables (see Table 1.7). The indicators of positive affect or attention from mother to son, such as COM, DM and particularly LV (the loving aspects of child rearing) tend to raise the child's self esteem (SEL) and thereby to raise his liking of academic activities (AC) which then brings about the raised educational

Table 1.4. Standardized Partial Regression Coefficients for the Regression of Child's Occupational Status Projection (OCC) on Independent Variables by Sub-Group and Sex: Coefficients in Hundredths

Independent Variables	Urban Black		Rural Black		Rural White		Total	
	Males	Females	Males	Females	Males	Females	Males	Females
AC	5	8	6	10	3	3	2	4
MED	- 9	- 1	15*	- 7	0	8	6	- 1
MOC	12	2	15*	16*	19*	17*+	17**	15**
SEL	- 7	5	- 5	7	1	5	- 1	4
FATK	- 4	5	- 1	15*	-13+	12*	- 4	12**
MOTK/a	12	19*	11	- 9	8	- 9	9*	- 6
COM	- 0	7	- 5	10	13+	3	3	6
PU	13	0	-10	8	- 3	- 6	- 2	1
DM	7	- 3	17*	- 6	8	8	8+	- 0
LV	9	1	8	- 6	- 6	- 1	2	- 1
CHA	12	4	15*	17*	10	- 0	13**	8+
OUT	18	7	15*	15*	8	5	13**	9*
FST/b	- 2	- 9	15*	3	3	24**	6	9*
IQ	17	20*	6	2	3	- 6	7	2
ACV	5	2	2	1	- 1	2	3	1
ANO	- 3	20*	- 2	4	- 2	- 6	- 3	3
FBK	- 4	15+	- 2	5	9	6	1	8
HOZ/c	-20*	- 5	2	1	8	11+	- 2	6
NOH	- 2	27**	0	3	- 5	5	- 0	10*
WEL	- 3	-17*	7	3	- 2	5	- 0	- 1
MOG	2	- 3	10	- 4	2	15*	6	4
R^2 =	17	21	20	11	12	15	12	8

Levels of Significance: ** = P ≤ .005, *+ = .006 ≤ P ≤ .01, * = .02 ≤ P ≤ .05,
+ = .06 ≤ P ≤ .10

/a Girls coefficients differ by sub-group

/b Girls coefficients differ by sub-group

/c Boys coefficients differ by sub-group

status projections (ED). This is, of course, what would be predicted from previous literature on self-evaluation and achievement motivation (Hammond, 1954; Kohn, 1959; Komarovsky, 1962; McKinely, 1964; McCarthy and Yancey, 1971:659). Interestingly, the results on the mediation of IQ suggest that one manisfestation of higher IQ may be an increase in being loved which then leads to raised aspiration-expectations.

Table 1.5. Influence of Independent Variables on Boy's Educational Status Projection (ED): Standardized Regression Coefficients in Hundredths

Independent Variables	Schools Adjusted Correlation	Basic Adjusted Regression	Fully Adjusted Regression
AC	35**	26**	26**
MED	29**	16**	14**
MOC	21**	8+	9*
SEL	23**	12**	3
FATK	18**	12**	10**
MOTK	10*+	- 2	- 4
COM	11*+	- 1	- 4
PU	1	0	2
DM	15**	9+	4
LV	20**	12*+	5
CHA	5	5	5
OUT	5	5	5
FST	-4	1	0
IQ	28**	25**	16**
ACV	16*+	7	- 1
ANO	-12*+	- 3	- 0
FBK	23**	19**	7
HOZ	- 5	- 5	- 1
NOH	- 7+	- 5	1
WEL	-11*+	- 8*	- 4
MOG	- 7+	- 7+	- 1

Levels of Significance: ** = $P \leq .005$ *+ = $.006 \leq P \leq .01$

* = $.02 \leq P \leq .05$ + = $.06 \leq P \leq .10$

Despite some differences by sex the pattern of variables appears to be quite similar for both boys and girls: academic motivation, mental ability, mother's parallel status projection have direct effects; self-evaluation, socioeconomic background have considerable indirect effects; and anomia, and mother's achievement values are found to be spuriously correlated with ED.

Although the very distinctive path of SEL-to-AC-to-ED is common to both boys and girls, the influence of a loving maternal orientation is mediated through this chain for boys only. The maternal behavioral orientation which does have some indirect influence on girls' ED is a depressing or negative effect of a punitive orientation.

In considering further some sub-group differences in the direct effects of the variables on ED (Table 1.8) some urban-rural differences may be noted. First, the relationship of FBK and HOZ to ED for all girls is clarified by the fact that these relationships are pronounced characteristics of urban black girls only. Also, the relationship of IQ to ED is not characteristic of rural black boys. It would appear, in fact, that the urban black and rural white categories are actually carrying the rural black category in the final sets of coefficients for all boys and girls. This is reflected to some degree in the lower amount of explained variance for the rural black groupings.

DISCUSSION

Perhaps the most interesting finding in the consideration of the antecedents of the child's occupational (OCC) and educational (ED) status projections is the apparently different sets of paths of influence for each (see Tables 1.4 and 1.8). For both sexes, OCC is primarily dependent upon the parallel measure

Table 1.6. Influence of Independent Variables on Girl's Educational Status Projections (ED): Coefficients in Hundredths

Independent Variables	Schools Adjusted Correlation	Basic Adjusted Regression	Fully Adjusted Regression
AC	20**	13**	13**
MED	30**	19**	18**
MOC	15**	4	4
SEL	16**	11*+	7+
FATK	4	3	1
MOTK	5	2	1
COM	15**	8+	7+
PU	-10*+	-10*	- 6
DM	4	4	2
LV	9*	- 0	- 5
CHA	- 1	- 2	- 2
OUT	8*	1	2
FST	3	- 4	- 5
IQ	25**	18**	11*+
ACV	20**	8	4
ANO	-14**	- 1	- 2
FBK	28**	23**	13**
HOZ	-14**	-15**	- 7+
NOH	3	5	5
WEL	- 7+	- 8+	- 0
MOG	- 9*	- 9*	- 3

Levels of Significance: ** = $P \leq .005$ *+ = $.006 \leq P \leq .01$

* = $.02 \leq P \leq .05$ + = $.06 \leq P \leq .10$

for the mother (MOC), significant other influence in the parent of the opposite sex (FATK, MOTK), and mother's personality preferences for her child (CHA, OUT). There are only weak indirect effects of socioeconomic background (FBK) and child's intelligence (IQ) which are mediated by MOC to OCC. There was little or no influence from the child's motivation (AC) or self-evaluation (SEL) or the mother's socialization orientations (COM, PU, DM, LV).

In contrast, ED for both sexes is strongly influenced by the direct effects of the child's AC, IQ, and also by MED. FBK has direct effects on ED for females and indirect effects for boys. Moreover, numerous variables have strong indirect effects on ED which are mediated by several variables. Among the variables with indirect effects, the parent-child relationship variables (COM, DM, PU, LV) come into play indicating the possible interpretation of socialization having a greater influence on educational status projections than on occupational projections. In other words, occupational status projections tend to be relatively independent of criteria traditionally held as determining life changes while educational projections for these pre-adolescents are considerably more influenced by socioeconomic, ability, motivational, and self-evaluative factors.

This may have several important implications for an analytical distinction between occupational projections and educational projections. First, it raises doubts about the desirability of treating occupational and educational status projections together as part of a constellation concept such as "ambition" (Turner, 1964). Secondly, the presence of more definitive antecedents of ED, coupled with greater overall explained variance in ED, possibly indicates less idealism in educational projections than in occupational projections. This is to say that educational status projections are influenced by the child's current participation in the educational process. The occupational status projections, however, are not influenced by the vague characteristics of the occupational attainment process.

Table 1.7. Summary of Tests of Elaboration of the Influence of Independent Variables on Child's Educational Status Projection (ED): Type of Effects

Boys			Girls		
Spuriousness	Mediation[a]	Direct	Spuriousness	Mediation[a]	Direct
MOTK	SEL via AC	AC	MOC	SEL via AC	AC
COM	LV via SEL	MED	COM	FBK (via MED, IQ)	MED
DM	IQ (via MED, LV, AC)	MOC	LV	-MOG (via FBK, ACV)	IQ
ACV	FBK (via IQ, MED, MOC)	FATK	OUT	-HOZ (via FBK, ACV)	FBK
-ANO		IQ		(-PU)[b]	
	(-NOH, WEL)[b]				

/a In considering the indirect effects, the first variable is the antecedent with the effect and the second variable is the intervening variable mediating most of the effect.

/b NOH, WEL and PU are in an anomalous causal status (see Tables 1.5 and 1.6).

Table 1.8. Standardized Partial Regression Coefficients for the Regression of Child's Educational Status Projection (ED) on Independent Variables by Sub-Grouping and Sex: Coefficients in Hundredths

Independent	Urban Black		Rural Black		Rural White		Total	
Variables	Males	Females	Males	Females	Males	Females	Males	Females
AC	32**	18+	20**	13+	25**	8	26**	13**
MED	9	- 4	6	15*	23**	27**	13**	18**
MOC	16*	- 1	1	- 4	9	13*	9*	4
SEL	21*	1	- 7	2	1	15*	3	7+
FATK	11	- 6	8	- 2	11+	4	10*+	1
MOTK	-16*	15+	4	1	- 3	- 5	- 4	1
COM	12	5	1	10	-16*+	0	- 4	7+
PU	- 0	2	0	- 4	1	-11+	- 2	- 6
DM	1	2	3	11	7	2	4	2
LV	-14	- 4	17*	-13	7	- 6	5	- 5
CHA	- 2	-16+	7	7	8	- 1	5	- 1
OUT	- 4	-10	- 3	5	11+	4	5	2
FST	5	- 5	8	- 6	- 4	- 6	0	- 5
IQ	18*	13	2	14+	20**	9	16**	11*
ACV	-10	- 1	12	3	- 3	6	- 1	4
ANO	- 1	- 1	0	- 8	2	- 0	0	- 2
FBK	0	32**	4	- 9	6	3	7	13**
HOZ	5	-28**	4	1	- 4	-11+	- 1	- 9*
NOH	6	6	- 6	- 4	- 3	7	1	4
WEL	2	- 7	11+	10	-10+	- 6	- 4	- 0
MOG	4	- 3	7	- 2	- 6	- 8	- 1	- 4
R^2 =	32	25	19	18	39	32	26	19

Levels of Significance: ** = $P \leq .005$ *+ = $.006 \leq P \leq .01$

* = $.02 \leq P \leq .05$ + = $.06 \leq P \leq .10$

The mediation of numerous indirect effects on ED and OCC by MED and MOC is, of course, supportive of recent findings which have called into question the "assumed" direct relationships between status projections and variables such as socioeconomic background and child's mental ability (Kandel and Lesser, 1969; Sewell and Shah, 1968). Mother's status projection (MOC) is the main intervening variable for child's OCC, whereas in the case of child's ED, the mother's MED is not the only mediating variable. Self-concept (SEL), academic motivation (AC), and mental ability (IQ), mediated indirect effects of the parent-child relationship variables and FBK.

A final consideration of the unique paths for OCC and ED is that each of these status projections is affected almost exclusively by the corresponding measure for the mother. That is to say, there is little effect of MOC on ED or

MED on OCC. This is similar to Haller and Woelfel's (1972) recent finding that significant others' expectations regarding one aspiration seem to have no effect on the other. The findings of this study, along with Haller and Woelfel's finding, raises the question of possible exaggeration of the extent to which mobility orientations of the child (OCC and ED) are actually transmitted by parental influence (MOC and MED). As Furstenberg (1971) cautions, parental influence on aspirations is not only relatively modest but also the relationship between parent's and child's aspirations does not necessarily mean that the child has actually acquired his or her aspiration directly from parents. Another plausible alternative is that parent-child agreement is not the result of socialization but rather is the result of numerous common factors acting upon family members that leads to independent agreement. Some evidence that is consistent with this alternative interpretation is the fact that the consistent influence of MOC on OCC and MED on ED is not supplemented by a consistent influence of mother's significant other influence (MOTK) and mother's degree of communication with her child (COM).

The relative absence of detectable sub-cultural differences suggests that, in accord with Merton's thesis (1968), success value orientations are not only common to various social strata but also the underlying *processes* related to success values may be diffused. An alternative explanation for the relative homogeneity of these sub-groupings is the age of the students and the fact that the sample is of lower social origin. At a latter age some variables may have different effects for comparative ethnic and residence types. This has been shown in the changes of the effects of significant others influence with age on the educational aspirations of Canadian youth (Williams, 1972). However, a study of the process underlying educational and occupational aspirations of Wisconsin males of various social origins reveals common antecedents (Sewell, Haller, and Ohlendorf, 1970).

The sub-grouping which does, to some degree, depart from the homogeneity in the antecedent of occupational and educational status projections is the urban black female category. Most notably, they were the only grouping in which the mother's status projections for her child's had no significant influence on either of the child's status projections. Furthermore, they were the only grouping in which mother's anomia had any influence on status projections, as it was a positive influence on the girl's occupational status projections. Their occupational projection was also positively influenced by "no husband" and child's "measured mental ability." In conjunction with this unique influence on a major dependent variable, a "demanding" orientation on the part of the mother has a depression effect on their designation of mother as a significant other. This profile, indicating a loss or even some negative maternal influence, suggests a greater generation gap between black mothers and their daughters in urban areas. This is not only congruent with a generational comparison of anomia and achievement orientations of blacks and whites (Youmans, *et al.*, 1969), but also suggests that some lower social strata black mothers may possibly be "negative role models" for their daughters. The significance of this may be in the fact that lower social strata youth are more likely to see their parents in a negative way in latter high school years rather than at the age of these girls (Simmons and Rosenberg, 1971).

While the differences that set these urban black girls apart are of small magnitude some support is evident for the argument that the high aspirations of minority youth are motivated by a desire to dissociate themselves from an inferior status (Antonovsky and Lerner, 1959). High aspirations, however, of academically bright girls from an anomic and structurally incomplete family does not necessarily lead to the conclusion that they are "compensating for anticipated future failure," (Cosby, Dietrich, White, 1972).

CONCLUSIONS

With the acknowledgement of some general limitations in making inferences from these data[2] several conclusions may be warranted. First, the influence of numerous variables upon the child's status projections involves considerable spuriousness and indirect effects, along with direct effects. Thus, elaboration of relationships, rather than reliance upon measures of association, would appear necessary in future examinations of the correlates of status projections.

Secondly, occupational and educational status projections are found to have apparently different sets of variables with significant influence. Occupational projection is primarily dependent upon a small cluster of maternal measures, while, in contrast, educational projection is also dependent upon the child's motivation, self-evaluation, intelligence, family background, and mother-child interpersonal relationships. This difference suggests that the occupational status projections of these young and disadvantaged students are considerably less influenced by criteria generally assumed to be related to success than are their educational projections. This difference may be further interpreted as a function of the student's participation in the educational attainment process while "anticipatory socialization" in the occupational attainment process is non-existent.

Finally, mother's status projections serve as the key intervening variables mediating the indirect influence of other variables on the child's status projections. While this is supportive of both traditional and recent findings emphasizing mother's influence on the child, possible exaggeration of the relationship is cautioned against.

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[2] Duncan (1966:1) contends that regression analysis is appropriate for "interpretation" of relationships and "not a method for discovering causes." Likewise Wilson (1971:441) contends that relationships such as found in our data "cannot be taken literally,"...nevertheless, can be useful in the "interpretation of social phenomena."

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CHAPTER VI

FINDINGS FOR THE BASELINE STUDY

Paper 2...Mothers' Attitudes and Their Aspirations for Their Children

This paper is concerned with the mothers' self-reported attitudes, social characteristics, and aspirations for their children as these influence the children's educational and occupational status projections. In examining the data the principal focus will be on differences or lack of differences between the six racial-residence-sex groupings, or "subcultures" by sex.

Two variables are of central concern, the mothers' aspirations-expectations for the children's occupation in the future (MOC) and their aspirations-expectations as to the level of education the children attain (MED). The measures of these variables were constructed from questions exactly parallel to those asked of the children and from which the parallel dependent variables, OCC and ED, were constructed. In the hypothesized causal chain, MOC and MED are placed antecedent to OCC, ED, and AC (child's academic motivation or liking for school) and subsequent to all the other variables. Thus mothers' aspirations are treated as independent variables influencing the children's aspirations and also as intervening variables through which the characteristics of the mother, the child, and the household may indirectly influence the children's career thinking. Theory, previous research (Furstenberg, 1971), and common sense lead us to expect a positive relation between the mothers' projections and those of the children.

The two attitudinal measures available for the mothers are ANO, the Srole Scale of Anomia, and ACV, a modification of Rosen's scale of Achievement Values. A high degree of anomia was expected to influence negatively a mother's educational and occupational plans for her child and possibly to exert a direct negative influence on the child's own projections. The mother's achievement values were expected to influence positively the level of her ambitions for her child, though this would, of course, be affected by her perception of the child's IQ, self-esteem and other characteristics.

Preceding ANO and ACV in the hypothesized causal chain are the age of the mother (MOG), whether the family is on welfare (WEL), the size of the household (HOZ), and the "no husband" indicator (NOH). Their placement here indicates that these demographic and status variables may influence the mothers' attitudes as well as all of the other variables, including the main dependent variables, the children's aspirations-expectations. Since the concern in the present paper is with the mothers' characteristics as reported by themselves, particular attention will be paid to delineating the influence of these variables on the mothers' status projections and their attitudes, and through these on the children's status projections. Some studies have found an association between age and anomia, and

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one might also argue that being on welfare, having no husband, and having many children might increase anomia, lower the mothers' achievement values, and lower their status projections for their children.

This paper is also concerned with the possible influence of ANO and ACV on all of the variables subsequent to them in the causal chain. Other papers will deal with these additional measures as independent or intervening variables affecting the ambitions of the children. Thus we will examine here the possible influence of the mothers' attitudes on the children's IQ scores (IQ), the characteristics mothers value in their children (OUT, CHA), the children's perception of the mothers' behavior toward them (LV, DM, PU, COM), the children's reported talk with their mothers and fathers concerning job or school plans (MOTK, FATK), and the children's self-concept (SEL).

The model employed for interrelating variables here, as in the other papers, is a set of multiple regression equations with each variable expressed as a linear function of all the variables which precede it, and the summary statistics are standardized regression coefficients plus partial and multiple correlation coefficients. Some attention will also be paid to means and standard deviations for the sex-subculture groupings. The interpretations are based primarily on significance levels and the patterns among the standardized coefficients rather than on the numerical values per se. The measures used are described in greater detail in other sections of this report.

Mother-Child Agreement on Status Projections for the Child

As can be seen in Table 1.5, Chapter V, the mean aspiration-expectation scores of mothers and of children are rather similar overall, both as to occupational prestige level and level of education. Even so, the mothers of boys tend toward visions of higher occupational prestige for their sons than the sons themselves envision, while the mothers of girls tend toward lower educational plans for their daughters than the daughters themselves hold. These mother-child differences are especially apparent in the urban black group.

No doubt the difference between the MOC and OCC scores for boys (70 vs 67 overall, 74 vs 70 for urban black boys) reflects differences in the specific occupations that boys think about versus what their mothers have in mind for them, as will be discussed later in the paper. The difference in educational level envisioned by mothers (MED = 5.52) and by their daughters (ED = 5.73) appears consistent with sex role changes going on in the wider society. Urban areas are the focal point of such changes and this seems reflected in the finding that mother-daughter differences in educational projections are greatest in the urban group (MED = 5.6, ED = 6.2).

Part of the notion of mother-child agreement is similarity or difference in average scores, while another aspect is the amount of relationship between a mother's score and her child's, case by case, after adjusting for whatever differences in the two averages there may be. The basic measures of relationship used in the present study are standardized partial regression coefficients, expressed in hundredths, and the ones relevant to mother-child agreement are shown in Table 2.1. For the combined samples of all boys and of all girls, OCC depends on MOC but ED does not to any great degree, while ED depends on MED, as should be the case. But results by subculture show this to be largely a phenomenon of the rural white group, and to a lesser degree the rural black group.

The percentages of variance explained, as shown in Table 2.2, further point up the strikingly low agreement between urban black mothers and their daughters on both types of projection, and between urban black mothers and their sons as to occupational projections. This may reflect, as Youmans (1969) has suggested, the greater exposure of urban children to extra-familial influences that shape their projections for themselves, with a resulting loss of parental influence. In particular, the civil rights revolution has brought rising expectations and probably created a greater gap between black mothers and their children in urban areas. It may be, too, that interaction within urban households is more hectic or otherwise not conducive to mother-child rapport.

It is also noteworthy that among rural whites, boys and girls are basically similar in the pattern of influence of MOC and MED on OCC and ED, while among the two black groupings, boys and girls show somewhat different patterns. The differences between mother-daughter and mother-son influences among blacks seem consistent with the hypotheses of Moynihan and others concerning greater maternal dominance in black families and its differential effect on boys and girls in such families (Moynihan, 1965).

Table 2.1. Influence of Mothers' Aspirations-Expectations for Their Children on the Children's Aspirations-Expectations, by Subculture and Sex: Standardized Regression Coefficients in Hundredths

		All		Urban Black		Rural Black		Rural White	
Independent Variable	Dependent Variable	Boys (709)	Girls (703)	Boys (108)	Girls (173)	Boys (242)	Girls (238)	Boys (287)	Girls (292)
MOC	OCC	17**	15**	11	2	15*	16*	19*+	17*+
	ED	9*	4	12	- 1	1	- 4	9	13*
	AC	- 4	3	-13*	- 1	- 3	4	0	0
MED	OCC	6	- 1	- 9	- 1	15*	- 5	0	8
	ED	16**	18**	13	- 5	8	18*	23**	27**
	AC	10*+	7+	15+	- 4	8	15*	9	6

Significance levels: ** = .005 or less, *+ = .01 to .006, * = .05 to .02, + = .10 to .06

Table 2.2. Additional Percent of Variance in OCC and ED Explained by MOC and MED Combined, by Subculture and Sex: Additional Percent of Regression Sum of Squares from All 20 Variables Due to MOC and MED for OCC and ED.

			Urban Black		Rural Black		Rural White	
Dependent Variable	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
OCC	24.4	25.3	7.3	.2	22.2	18.8	24.4	24.1
ED	15.2	18.5	11.5	1.0	3.8	12.6	15.3	29.0

Education-Occupation Agreement for Children and for Mothers

As Table 2.3 indicates, the correlations between the mothers' educational aspiration-expectations (MED) and their occupational aspirations-expectations (MOC) are greater than the correlations of the children's corresponding aspirations-expectations (ED and OCC). In both cases the correlations seem low. This perhaps should not be surprising for children of this age ~~in this age~~ in this setting but the low correlations for mothers suggest low awareness concerning the educational requirements of different levels of occupations and/or low salience of the educational and occupational future of their children of this age. Even if the mothers' responses mainly reflect success value orientations this would be true of both their occupational and their educational projections and the two should be more closely associated as knowledge increases. Still, available measures and measuring techniques (in this study and others) for occupational prestige are somewhat crude and this certainly affects the correlations.

Table 2.3. Partial Correlations Between MOC and MED and OCC and ED After Adjusting for All Preceding Variables in the Causal Chain, and After Adjusting for Schools Only, Compared to Zero-Order Correlations; by Subculture and Sex.

		All	All	Urban Black		Rural Black		Rural White	
Adjustment	Variables Correlated	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Adjusted for all earlier variables	MOC and MED	.23	.24	.19	.27	.24	.21	.22	.27
	OCC and ED	.15	.17	.17	.09	.16	.24	.18	.08
Adjusted for school (School mean subtracted)	MOC and MED	.35	.29	.30	.32	.35	.25	.37	.31
	OCC and ED	.23	.21	.19	.19	.26	.27	.25	.17
No Adjustment (Zero-order correlation)	MOC and MED	.34	.24	.32	.33	.34	.26	.39	.34
	OCC and ED	.26	.25	.19	.14	.28	.27	.25	.23

On the basis of the unadjusted or zero-order correlations, the higher agreement for mothers than for children between occupational and educational status projections is true only for boys and their mothers. This is probably due to the specific occupations most often mentioned by mothers as they differed from those named by their sons. This can be seen by comparing Table 2.4 with Table 1.3 of Paper 1. The mothers favored "teacher," "doctor," and "engineer," while the boys tended to name "athlete," "policeman," or "race driver" more often. Obviously the status ranking of the professional occupations listed by the mothers correlates more highly with the rather high educational levels projected by both mothers and sons than do the somewhat romantic occupations favored by the sons. On the other hand, mothers and their daughters both named "nurse," "teacher," and "secretary" most often and no other specific occupation very often.

Table 2.4. Percentage of Mothers Naming Various Specific Jobs as Aspired to and Expected, by Sex of Child to Whom the Projections Apply

Boys				Girls			
Jobs Aspired to	Percent	Jobs Expected	Percent	Jobs Aspired to	Percent	Jobs Expected	Percent
Teacher	20	Teacher	10	Nurse	30	Teacher	18
Doctor	9	Mechanic	8	Teacher	26	Nurse	17
Engineer	4	Farmer	7	Secretary	15	Secretary	11
Mechanic	4	Factory Work	6	Beautician	2	Housewife	10
Lawyer	4	Doctor	5	Factory Work	2	Beautician	4
Factory Work	3	Athlete	4	Office Work	1	Factory Work	4
Office Work	3	Engineer	3			Maid	2
Farmer	3	Office Work	2			Office Work	1
Scientist	2	Pulpwood Work	1				
Trucker	1	Carpenter	1				
Other	27	Other	39	Other	10	Other	8
Don't Know	20	Don't Know	24	Don't Know	12	Don't Know	23

The regression-adjusted correlations between MOC and MED of around .20 or more in all six groups (all significantly different from zero) indicate that there is a component of mothers' status projections not explained by the variables antecedent of MED and MOC in the causal chain. This could be some recent or temporally local information the mothers have received that boosted or depressed their status projections for their offspring. Of course it may be due to the children's own expressed aspirations or expectations but such an influence is deemed relatively unlikely, as reflected in our choice of causal ordering.

Although 4 of the 6 regression-adjusted OCC-ED correlations are significantly different from zero (5% level), they are mostly quite small, ranging from .08 to .24. Again, there may be some temporally local (and thus subculture-specific) component of ambition that is not explained by the study variables but it is not large. It may be, too, that by controlling on race, residence and school as has been done in this study, some differences that in other studies would have been considered subcultural differences have been obscured.

Mothers' Aspirations-Expectations for their Children's Education and Occupation

In the previous section the children's and the mothers' status projections were discussed in terms of "agreement" or difference, with no causal implications other than mutual influence. In this section the data are presented and discussed in terms of the hypothesized causal chain--more particularly, the dependence of MOC and MED on the eighteen variables antecendent to them. Although one may speculate that the mother's high or low level of aspirations is fixed first and her child's is then affected accordingly, the data cannot be used to decide on the direction of causality. However, there seems less danger of causality actually moving backwards, so to speak, when dealing with these other eighteen variables and consequently the language of unidirectional influence will be used.

Tables 2.5 and 2.6 present the data on variables that might influence the mothers' aspirations and expectations concerning their children's future schooling (MED) and occupations (MOC). Inspection of these tables indicates that only two variables have much apparent influence on MOC and MED--the children's IQ scores and family background (FBK). Family background, a composite measure of community participation, church attendance, income, education, and voting behavior, is taken to be an indicator of relative family status within the low-income groups to which all of the respondents belong.

Table 2.5. Dependence of the Mothers' Occupational Status Projections for their Children on Other Variables, by Subculture and Sex: Standardized Partial Regression Coefficients, in Hundredths.

Independent Variable	All Boys	All Girls	Urban Black Boys	Urban Black Girls	Rural Black Boys	Rural Black Girls	Rural White Boys	Rural White Girls
SEL	- 3	1	- 8	6	- 1	3	- 4	- 8
FATK	1	- 1	- 7	5	0	12+	2	8
MOTK	2	- 6	6	10	- 5	-10	6	-13*
COM	1	1	- 1	8	3	- 7	1	1
PU	- 7+	- 1	- 6	3	- 4	- 7	- 5	0
OM	2	0	- 7	- 9	- 2	4	13+	6
LV	3	4	10	- 5	10	8	- 5	5
CHA	0	5	- 1	- 3	4	10	- 5	6
OUT	4	2	2	- 3	4	5	4	1
FST	5	6+	3	8	13*	5	- 4	7
IQ	14**	23**	26**	31**	9	16*	15*	20**
ACV	8	0	4	14	20*+	-11	- 2	0
ANO	- 2	2	- 3	8	3	0	- 6	4
FBK	22**	5	10	3	21**	7	25**	5
HOZ	1	2	- 5	0	9	- 2	- 8	8
NOH	- 3	3	7	1	- 7	3	-10	6
WEL	0	- 4	- 6	4	5	4	- 1	-19**
MOG	- 3	0	-10	3	3	- 2	- 5	3
R^2	.14**	.07**	.16+	.18*	.17*+	.10	.18**	.12*+

Significance levels: ** = .005 or less, *+ = .01 to .006, * = .05 to .02,
+ = .10 to .06

It seems clear that the mothers are aware, at least in a general way, of how "bright" their children are (as measured by test scores) and that this influences the level of occupation and education they project for them--even though other indicators might suggest rather poor mother-child communication and low influence of the mothers on their children's plans at this stage of their development. Actually the influence of IQ scores--or the mothers' perception of how bright the child is--and mothers' aspirations-expectations for the children is possibly reciprocal, since children may respond to the expectations of significant others by doing correspondingly better or worse than they otherwise might. The influence o IQ is especially strong among urban blacks, particularly on MOC, the mother's occupational status projections. This suggests the greater salience of economic exchange rationality in the city environment. Urban black mothers, more than othe may believe that ability can be traded for prestige occupations.

Table 2.6. Dependence of the Mothers' Educational Status Projections for their Children on Other Variables, by Subculture and Sex: Standardized Partial Regression Coefficients in Hundredths

Independent Variable	All		Urban Black		Rural Black		Rural White	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
SEL	6	3	2	- 3	6	7	3	0
FATK	1	5	-10	9	4	0	5	8
MOTK	- 2	4	4	3	- 4	7	- 4	2
COM	- 1	- 6	- 8	- 8	1	- 8	1	- 3
PU	3	- 1	9	- 4	- 2	- 2	2	0
DM	- 6	- 6	- 8	12	-10	- 6	- 1	-14*
LV	2	1	15	-14	0	5	- 2	5
CHA	12**	5	9	13+	9	3	12+	1
OUT	5	1	17*	- 1	1	4	- 1	- 3
FST	4	1	5	11	17*	2	- 8	- 6
IQ	18**	15**	20*+	17*	13+	16*	14*	8
ACV	14*+	5	2	9	24*+	4	9	0
AND	- 7	2	- 6	- 4	- 1	4	-10+	6
FBK	23**	32**	6	32**	16*	34**	35**	33**
HOZ	-10*	- 6	-12	-11	- 4	2	-11	- 6
NOH	- 5	8*	-10	4	- 4	12+	- 4	6
WEL	- 3	- 7*	-12+	- 9	2	1	0	-15*
MOG	0	- 3	- 1	- 3	4	2	- 5	- 9
R^2	.23**	.20**	.25**	.28**	.19**	.21**	.34**	.23*

Significance levels: ** = .005 or less, *+ = .01 to .006, * = .05 to .02,
+ = .10 to .06

Influence of family background on the mothers' projections for the eventual educational level of their children is quite evident, though there is a low, nonsignificant relation in the case of urban black boys. Perhaps in this case the higher status mothers do no project correspondingly high education for their sons because they feel that "street" or peer group influences are likely to outweight family status and negatively influence how far they will go in school. (Of course the opposite could also produce the same result--that lower status mothers project high education for their sons, regardless of other considerations.)

The influence of family background is less clear in the case of the mothers' occupational projections. In fact, there is a significant and substantial regression coefficient only in the case of rural boys, both black and white. The reason for this sex and subculture difference is not entirely apparent, but it may reflect the narrow range of occupations--mainly lower white-collar jobs--in which most of the occupational projections for girls fall. Jobs for boys, as projected by their mothers as well as by themselves, are spread through a broader range, from blue collar to the higher professional ranks, thus making possible more discrimination on the basis of family background. For example, both low and higher status mothers may expect secretarial jobs for their daughters, but apparently it is mostly the higher status mothers who think of doctor or lawyer for their sons.

Among the variables not having a significant influence on the mothers' educational or occupational plans for the child, perhaps a few require comment. A high degree of anomia (ANO) on the part of the mother was expected to have a depressing effect on her projections for the child but there are only slight indications of such an effect--despite a rather high incidence in the rural areas of anomic attitudes. (See Table 2 of Chapter V.) Similarly, being on welfare seems to have very little effect, though there are indications of a slight negative effect and, in one group, the mothers of rural white girls, there is a significant negative regression of both MOC and MED on WEL. It may be that the high incidence of anomic responses reflects more a low-income subcultural outlook, perhaps a "realistic" one, than it does a real pathology. Or it may indicate acquiesence type responses. The reason why being on welfare depresses the rural white mothers' projections for their daughters but not for their sons is possibly that the mothers foresee that their daughters will marry early to escape home conditions and thus will likely abort their education and career chances.

Neither the general lack of direct relationship between the mothers' projections for the 5th and 6th grade children and the characteristics they value in their children (OUT, CHA) or the child's perception of the mother's behavior toward him (LV, DM, PUN, COM), nor the few significant relationships within particular groups, seem very explainable within the theory and assumptions of this study. In view of the low magnitude of the coefficients and the random distribution of the few significant or near-significant relationships they may represent chance variation more than important real differences.

There is no evidence of any direct influence of the child's self-concept (SEL) on the mother's educational and occupational projections for him, but perhaps the self-concept is too diffuse, invisible, or unarticulated at this age for influence on the mothers' projections to be expected. The extent to which the children say they have talked to their parents about future schooling and job (MOTK, FATK) also appears largely unrelated to the mothers' status projections.

There is some indication that a large number of household members (HOZ) --presumably mostly children--has a depressing effect on the educational projections of urban black mothers of boys and girls and rural white mothers of boys, but this is not very evident in the educational projections of the other three groups of mothers or the occupational projections in any group. The mothers' own achievement value scores are associated (positively) with their educational and occupational plans for the children only in the case of the mothers of rural black boys. As association (positive) between being firstborn and the mothers' projections also appears only in the case of rural black boys. There is no apparent reason why such relationships should be strong in this one group and not in others.

In terms of the percent of variance explained (R^2) by these 18 variables it is clear that they are more explanatory of the level of the mothers' educational projections than of the prestige level of the occupations they project for their children. The percent of variance explained is highest for the educational projections of the mothers of rural white boys and lowest for the occupational projections of the mothers of rural black girls. The urban black mothers are intermediate in percent of variance explained and the differences between mothers of boys and mothers of girls are small in this group.

Mothers' Attitudes and Achievement Values

Table 2.7 indicates that family background or status (FBK) and the mothers' values (ACV) are both inversely correlated with the mothers' anomia score (ANO) and that family background is positively correlated with mother's achievement values. The partial correlation coefficients of achievement values and anomie are so high as to indicate considerable overlap or that the two variables are to some extent measuring the same thing. This is in accord with theoretical expectations and the content of the two scales. It was also expected that family background and the mothers' achievement values would be positively associated, as they are, and it follows, then, that family background and the mothers' anomia would be negatively associated, as they are.

Table 2.7. Partial Correlations Between FBK, ANO, and ACV after Adjusting for all Antecedent Variables in the Causal Chain, by Subculture and Sex

Variables Correlated	All Boys	All Girls	Urban Black Boys	Urban Black Girls	Rural Black Boys	Rural Black Girls	Rural White Boys	Rural White Girls
FBK and ANO	-.23	-.31	-.23	-.12	-.27	-.31	-.31	-.38
FBK and ACV	.37	.42	.38	.27	.37	.44	.37	.48
ACV and ANO	-.52	-.54	-.56	-.55	-.57	-.52	-.46	-.56

But the mothers' degree of anomia or its absence (Table 2.8) does not seem to influence any of the other variables appreciably. There are no substantial or significant regression coefficients for ANO and the main dependent variables (OCC, ED), except in the case of the occupational projections of urban black girls, as was mentioned in Paper 1. Similarly, as has already been shown, there is no influence of the mothers' degree of anomia on the mothers' status projections for their children. Influence is equally lacking with regard to anomia and the other variables in the causal chain, with the exception of some slight indications of influence on the characteristics mothers value in their children. But in the latter the low magnitudes and opposite directionality of the relationships serve more to confuse than to clarify. As indicated earlier the validity of the Srole Scale--or even the concept of anomia--as applied to populations such as those studied here may perhaps be questioned, either because the so-called anomic attitudes are normative here or because of "acquiesence" responses in some groups.

The mothers' achievement values (ACV) appear to have somewhat more influence on other variables than does their degree of anomia, but, again, the overall influence is slight and not in a clearcut pattern (Table 2.9). The regression coefficients of ACV on the principal dependent variables (OCC, ED) are low and non-significant. The same is true for most of the other variables, with only a few scattered and puzzling significant relationships in specific sample segments. However, the influence of the rural white mothers' achievement values on their emphasizing the value of character (CHA) in children of both sexes, and the lack of such influence in the other groups, may represent a real and important sub-cultural difference. A relationship between the mother's achievement values and the child's IQ score was expected, but it is puzzling that there was a significant influence of such values on IQ only in the case of rural black girls and rural white boys, with an influence approaching significance in the case of urban black girls.

Table 2.8. Influence of Mothers' Anomia Scores on Other Variables, by Subculture and Sex: Standardized Partial Regression Coefficients, in Hundredths

Dependent Variable	All		Urban Black		Rural Black		Rural White	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
OCC	- 3	3	- 3	20*	- 2	4	- 2	- 6
ED	0	- 2	- 1	- 1	0	- 8	2	0
AC	- 3	4	1	5	-10	- 5	- 3	9
MOC	- 2	2	- 3	8	3	0	- 6	4
MED	- 7	2	- 6	- 4	- 1	4	-10+	6
SEL	0	4	- 7	3	- 1	1	4	9
MOTK	- 1	5	9	- 5	- 4	7	- 8	11
FATK	- 5	1	- 7	- 1	- 8	2	- 3	5
LV	6	- 2	- 4	- 4	13	9	8	- 6
DM	2	3	-10	- 3	2	9	10	4
PU	- 3	5	-13	3	2	7	1	2
COM	0	1	- 2	6	- 6	- 1	5	4
OUT	-11*	- 4	-17+	7	- 2	- 3	- 8	-11
CHA	8+	- 1	11	-13	- 3	-14+	8	12+
IQ	- 8*	- 2	-11	- 1	-14	5	- 5	- 3
FST	2	- 2	19*	- 6	- 4	- 4	- 3	2

Significance levels: * = .05 to .02, + = .10 to .06

Table 2.9. Influence of Mothers' Achievement Values on Other Variables, by Subculture and Sex: Standardized Partial Regression Coefficients, in Hundredths

Dependent Variable	All		Urban Black		Rural Black		Rural White	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
OCC	3	1	5	2	2	1	- 1	0
ED	- 1	4	-10	- 1	12	3	- 3	6
AC	- 4	- 4	0	3	- 2	-13	- 5	- 8
MOC	8+	0	4	14	20*	-11	- 2	0
MED	14*+	5	2	9	24*+	- 4	9	0
SEL	- 3	8	-14	2	- 4	3	1	13+
MOTK	3	5	12	20*	2	7	- 2	0
FATK	0	- 2	- 1	- 5	- 8	3	6	- 1
LV	15*+	1	10	-16	19+	8	12	12
DM	9+	6	- 1	0	10	11	12+	5
PU	- 3	1	- 1	1	- 3	- 6	0	5
COM	4	7	- 2	10	4	11	5	5
OUT	- 3	11*	- 2	14	- 2	27*+	0	0
CHA	17**	11*	8	- 1	10	3	23**	19*+
IQ	9*	13*+	2	16	6	32**	15*	5
FST	- 9*	- 8	6	- 4	-12	-11	-13*	- 7

Significance levels: ** = .005 or less, *+ = .01 to .006, * = .05 to .02,
+ = .10 to .06

Status Characteristics of the Mother and the Household

Table 2.10 provides evidence that the characteristics of the mothers for which we have data exert some influence on the level of the mothers' achievement values but very little on her degree of anomia. The mother's age (MOG) significantly and negatively influences her achievement values (ACV) in five of the six subgroups but age shows little influence on anomia (ANO). Being on welfare also seems to have the expected negative influence on achievement values, though the coefficients are significant in only three of the groups.

The expected positive association between anomia (ANO) and being on welfare (WEL) holds in two of the groups but since there would seem to be no reason why the relationship of being on welfare to the mothers' anomia would vary with the sex of the survey child, it seems difficult to draw any conclusion. There are no significant and substantial relationships of these attitudinal variables with the mother's having or not having a husband (NOH) and with the size of the household (HOZ), though most of the small relationships are in the expected negative direction for ACV and positive direction for ANO.

Table 2.10. Dependence of the Mothers' Anomia and Achievement Value Scores on Status Characteristics of the Mother and the Household, by Subculture and Sex: Standardized Partial Regression Coefficients, in Hundredths

Dependent Variable	Independent Variable	All		Urban Black		Rural Black		Rural White	
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
ANO	HOZ	0	8*	7	13+	- 5	3	2	7
	NOH	7+	3	10	15+	8	3	3	- 7
	WEL	2	12**	- 3	1	- 6	14*	10	19**
	MOG	5	6	- 8	- 3	10+	1	7	15*
ACV	HOZ	- 2	-11*	- 6	-12	2	-10+	- 6	- 9
	NOH	- 1	- 2	- 1	- 2	- 1	- 4	- 3	2
	WEL	-16**	-10*+	-21+*	-13	- 4	- 8	-26**	-13*
	MOG	-12**	-14**	-12+	-13+	-11*	- 4	-15*+	-28**

Significance levels: ** = .005 or less, *+ = .01 to .006, * = .05 to .02,
+ = .10 to .06

Summary

The thing that stands out most clearly concerning the mothers' attitudes and their aspirations for their children, as these affect the children's status projections and are affected by other variables, is the lack of consistent and strong relationships, except in a few instances. In addition to lack of evidence of some of the expected relationships, there are indications in the case of some variables of influence in the opposite direction from that expected. The general lack of significant relationships for some variables may be partly due to the age level of the students and the consequent instability of their career thinking, as well as the lack of salience for the mothers of serious career thinking concerning these children, particularly when they have older children who are nearer the stage of crucial career decisions. But some of the lack of expected relationships may represent real subcultural and sex differences. Additional research is needed to confirm or disconfirm the apparent differences. Meanwhile the general lack of expected influence of the mothers' thinking on that of their children suggests that there is plenty of room for earlier and better mother-child communication regarding careers. It was to this end that the experimental phase of the present study, described in Chapters VII through X, was carried out.

There is somewhat more evidence of the mothers' aspirations influencing the children's thinking among rural white mother-child pairs than in the two black groupings. But the lack of an urban white sample weakens the tentative conclusion that this is primarily racial and subcultural rather than only a rural-urban difference among low-income groups.

Among factors thought to influence the mothers' plans for their children and thus indirectly to influence in some degree the children's career thinking, the child's IQ and the family background are the only ones where such an influence is fairly clear and consistent. While other studies have generally assumed that the influence of IQ and family background is direct, the present study indicates a more indirect path to the children's status projections. But the general lack of influence of the mothers' anomia level on their plans for the children does not conform to theoretical expectations, possibly because "anomia," as defined by the Srole Scale, may be normative in these low-income subcultures. The inconsistent or uneven influence of the mothers' achievement values on their status projections for their children also does not conform to previous theory and research. If the present sample had cut across all socioeconomic and class levels these attitudinal variables might have performed as expected, but within the narrow social status range of the present study they do not seem to be predictive of status projections.

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CHAPTER VI

FINDINGS FOR THE BASELINE STUDY

Paper 3...Influences on Child's Academic Motivation, Self-Concept, and Designation of Parents as Significant Others

As shown in Paper 1 the child's academic motivation, self-concept, and significant other influence are important variables affecting the child's status projections. The child's educational projection is directly influenced by academic motivation; the influence of self-concept on educational projection is mediated by academic motivation; and together self-concept and academic motivation provide the linkage for the influence of parent-child behavior on educational projection. The relatively modest direct effects of significant other influence in the parent of the opposite sex on the child's occupational projection is also noted.

This paper is concerned with the direct effects of antecedent variables on the child's academic motivation (AC), self-concept (SEL), and the child's reporting that his father's (FATK) and/or mother's (MOTK) conversations concerning his or her educational and occupational future has been most influential on status projections. A brief examination of the variables upon which they are dependent is necessary for gaining a better understanding of the processes related to the status projections of these students.

Academic Motivation

For both boys and girls the primary determinant of academic motivation (AC) is self-concept (SEL) and to a lesser extent measured intelligence (IQ) and high performance expectations of the mother (DM). (See Table 1). For girls the addition of influence of mother's loving (LV) child-rearing orientation is supportive of previous literature which indicates that achievement motivation has its impetus in early affective parental behavior (Rosen and D'Andrade, 1959). In other words, the transmission of achievement value occurs in socialization orientations conveying a system of high parental expectations facilitated by rewards and punishment. (See Heckhausen, 1967).

The path of SEL → AC → ED is further noteworthy because of the rather unique scale used to measure SEL. The fact that the scale is devoid of "achievement" or "ability" items suggests that "self worth" (implied by the instrument) is related to academic orientations. Ability is likewise a facilitator of such orientation, for, as noted, IQ is also a significant antecedent of AC. This set of paths is

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also supportive of McCarthy and Yancey's (1971:659) contention that an intrinsic relationship exists between academic orientations and self-concept whatever the measure of the latter.

Table 3.1. Dependence of Child's Academic Motivation (AC) on Independent Variables by Sub-Group and Sex: Standardized Partial Regression Coefficients in Hundredths

Independent Variables	Urban Black Boys	Urban Black Girls	Rural Black Boys	Rural Black Girls	Rural White Boys	Rural White Girls	All Boys	All Girls
MED	15+	- 5	8	15*	9	6	10*+	7+
MOC	-13*	- 1	- 3	4	0	0	- 4	3
SEL	24**	30**	35**	26**	40**	26**	31**	28**
FATK	6	2	- 1	- 8	- 3	20**	0	7+
MOTK	5	5	3	- 6	7	1	6+	2
COM	1	22**	10+	9	6	-11+	7+	8*
PU	-13+	-13*	7	0	11+	- 5	3	- 5
DM	25**	6	6	30**	12+	9	13**	10*+
LV	6	5	5	10	12+	21**	7+	12**
CHA	- 9	12+	- 3	- 1	- 7	- 8	- 5	- 0
OUT	- 3	5	- 2	- 8	-10	- 5	- 5	- 1
FST	- 4	- 6	- 6	- 4	5	2	- 1	- 2
IQ	17*	5	- 2	17*+	12*	8	11*+	9*
ACV	0	3	- 2	-13	- 5	- 8	- 4	- 4
ANO	1	5	-10	- 5	- 3	9	- 3	4
FBK	-11	8	1	- 8	9	3	1	- 2
HOZ	7	4	- 6	8	1	14*	0	9*
NOH	3	9	- 9	6	4	3	- 2	6
WEL	- 7	- 6	3	- 3	6	-11	1	- 6+
MOG	-11	-20**	- 7	- 1	1	- 0	- 6+	- 6+

** = P <.005   *+ = P .006 < P < .01   *= P .02 < P < .05   + = .06 < P < .10

While these antecedents of AC are consistent with the literature it is interesting to note a lack of support for other variables that have been so identified. Not only is there an absence of influence from significant others (FATK, MOTK), family background (FBK), but also no influence from mother's achievement value orientations (ACV), or anomia (ANO). On the other hand the level of the mother's more specific educational plans for her child does appear to influence AC except for the urban girls. Among the urban groups, mother's age seemed to depress AC. The larger size of household, interesting enough, may positively affect AC at least for rural white girls.

Several additional racial-residential differences are to be noted. The relationship of COM to AC is most characteristic of the urban black girls and the relationship is, in fact, negative for rural white girls. This is, perhaps, congruent with the apparent "independence" or "autonomy" of the urban black girls that is mentioned in other papers (see Coleman, Paper 2, and Butler and Baird, Paper 1). Other statistically significant differences are father's influence (FATK) on rural white girls' AC and a negative relationship between a punishing mother (PU) and urban black boys' AC, while the relationship is a positive one for the two groups of rural boys.

Self-Concept

The significant antecedents of SEL for both boys and girls give strong support for Coopersmith's (1967:164-234) summation of the influence of parental behavioral orientations on the child's self-esteem (Table 2). The positive influence of LV and DM, coupled with the negative influence of PU, confirm the idea that parental warmth and high expectations enhance positive self-regard while parental rejection, domination, and severe punishment depress self-regard.

There is some evidence that IQ is one of the variables affecting the boy's self-esteem, however, this relationship is strong only for urban black boys. Most of the influence of IQ on SEL for boys is an indirect effect which is mediated by the maternal behavior variables LV, PU, and DM.[1]

The only other variable related to SEL is father's influence (FATK) for boys.[2] It is of interest that not only is mother's influence (MOTK) lacking, but also mother's achievement orientations (ACV, ANO), FBK, no husband (NOH), household size (HOZ), and welfare status (WEL) have little or no impact on self-concept. This latter point is congruent with McCarthy and Yancey's (1971) criticisms of previous literature that emphasizes the self-defeating environment of the disadvantaged.

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[1] Test of elaboration for the antecedents of SEL for boys (not shown) reveal that a standardized partial regression value of .203 for SEL on IQ is reduced to a value of .106 when the effects of COM, DM, PU, and LV are partialled out.

[2] Noteworthy are the spurious correlations of FATK, MOTK with girls' SEL and MOTK with boys' SEL. Significant correlation coefficients (not shown) are reduced with the inclusion of COM, PU, DM, LV in the regression model.

Table 3.2. Dependence of Child's Self-Concept (SEL) on Independent Variables by Sub-Grouping and Sex: Standardized Partial Regression Coefficients in Hundredths

Independent	Urban Black		Rural Black		Rural White		All	
Variables	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
FATK	3	8	21**	- 4	12*	2	14**	3
MOTK	0	9	2	- 1	6	2	2	3
COM	16*	21**	10	- 5	0	5	8*	6
PU	- 8	-24**	-20**	-25**	-30**	-36**	-21**	-29**
DM	8	18*	9	31**	13*	14*	11*+	19**
LV	33**	- 0	34**	22*+	27**	24**	31**	18**
CHA	- 8	- 0	- 2	2	10	- 8	3	- 3
OUT	3	- 4	9	- 3	2	- 2	5	- 1
FST	6	3	- 6	9	- 9	1	- 4	4
IQ	18*+	-11	7	12+	4	- 5	10*	1
ACV	-14	2	- 4	3	1	13+	- 3	8
ANO	- 7	3	- 1	1	4	9	- 0	4
FBK	1	2	5	-10	7	- 1	4	- 3
HOZ	1	- 1	2	- 1	- 8	-15*+	- 1	- 6
NOH	- 8	-16+	3	2	5	- 5	- 1	- 4
WEL	1	3	7	- 1	4	- 6	4	- 2
MOG	- 4	7	7	1	- 9	- 1	1	- 0

** = P .005   *+ = .006 < P .01   * = .02 P < .05   + = .06 < P < .10

Significant Other Influence

The only persistent antecedent for both boy's and girl's reporting father (FATK) on mother (MOTK) as influential on their occupational and educational future is a loving (LV) maternal behavior orientation (Tables 3 and 4). Perhaps this is indicative of the positive regard accorded parents when the mother's behavioral orientation is perceived by the child as "affectionate," "concerned," and "supportive." This is to say that the "designation" of significant other status (one who is assumed to have influence on attitudes of another, or assumed to be a role model) is contingent upon the quality of parent-child interaction (see Furstenberg, 1971). It should be pointed out, however, that a "designation" of significant other status does not necessarily lead to actual influence on another, as revealed by the weak influence of FATK and MOTK on OCC and ED. It would appear that, for these students, the designation of significant other status is, perhaps, more "honorific" than functional.

The findings that COM is an antecedent of MOTK for both males and females is consistent with literature that indicates "participatory socialization," in contrast with "repressive socialization," is conducive to parental influence, (McClelland, 1955; Rosen, 1964b; Rosen and D'Andrade, 1959). Other significant relationships of variables with FATK and MOTK are less simply patterned but those for IQ in Table 3.4 perhaps deserve some comment. There is generally positive association between IQ and MOTK for boys, while it becomes negative for girls and seems to indicate that mothers may play a supportative role for girls but an inspirational role for boys. This interesting cross-sex parental relationship has already been noted in Paper 1. The fact that punishing (PU) behavior is positively related to mentions of the mother, as seen in Table 3.4, shows simply that the MOTK variable is sensitive to the sheer volume of mother-child interaction.

Table 3.3. Dependence of Child's Reporting Father as Significant Other (FATK) on Independent Variables by Sub-Group and Sex: Standardized Partial Regression Coefficients in Hundredths

Independent Variables	Urban Black Boys	Urban Black Girls	Rural Black Boys	Rural Black Girls	Rural White Boys	Rural White Girls	All Boys	All Girls
COM	3	- 2	9	- 8	6	13*	6	3
PU	8	6	- 9	16*	5	1	0	6
DM	17+	- 8	0	8	4	- 9	6	- 2
LV	5	14	20*+	12	15*	17*	13**	14**
CHA	- 8	2	8	- 3	-15*	- 7	- 2	- 3
OUT	-12	- 1	- 4	- 2	- 3	- 8	- 4	- 4
FST	- 1	-11	12+	- 6	6	13*	8+	2
IQ	8	- 0	- 7	3	11+	- 4	3	1
ACV	- 1	- 5	- 8	3	6	- 1	- 0	- 2
ANO	- 7	- 1	- 8	2	- 3	5	- 5	1
FBK	-11	1	12+	- 3	- 2	5	1	3
HOZ	7	- 8	- 1	7	5	- 8	3	- 2
NOH	-22*+	-41**	-22**	-23**	-37**	-18**	-27**	-26**
WEL	- 9	21*+	- 1	- 3	6	- 6	- 1	3
MOG	-12	-11	9	4	- 3	- 6	- 1	- 4

** = P .005 *+ = .006 P .01 * = .02 P .05 += .06 P .10

Table 3.4 Dependence of Child's Reporting Mother as Significant Other (MOTK) on Dependent Variables by Sub-Group and Sex: Standardized Partial Regression Coefficients in Hundredths

Independent Variables	Urban Black Boys	Urban Black Girls	Rural Black Boys	Rural Black Girls	Rural White Boys	Rural White Girls	All Boys	All Girls
COM	10	11	1	1	14*	7	9*	10*
PU	7	2	15*	4	4	- 2	7+	2
DM	- 3	-16+	- 5	14	7	2	1	3
LV	35**	36**	18*	25**	13+	14*	20*+	22**
CHA	6	- 1	1	- 2	- 6	3	1	- 0
OUT	0	- 2	1	- 4	- 3	- 2	- 0	- 2
FST	14+	9	6	-16*	4	10	8*	3
IQ	18*	-14+	- 2	-18*+	17*	- 4	11*	-11*
ACV	12	20*	2	7	- 2	0	3	5
ANO	9	- 5	- 4	7	- 8	11	- 1	5
FBK	- 1	- 6	11	- 3	0	7	4	1
HOZ	3	15+	2	- 7	1	- 5	1	- 3
NOH	0	- 3	2	5	- 1	12+	- 0	7
WEL	13+	19*	2	2	5	-22**	6	- 5
MOG	- 7	- 4	7	- 9	- 2	2	0	- 2

** = P .005 *+ = .006 P .01 * = .02 P .05 + = .06 P .10

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CHAPTER VI

Paper 4...Child's IQ, Being Firstborn, Child's Perception of Mother's Behavior Mother's Values For Her Child, and Their Relationships With Other Variables

Introduction

The discussion in this paper will be centered on two child variables, the child's IQ and an indicator variable denoting firstborn or an only child (FST) along with six others measuring mother-child relationships. These eight variables are placed midway in the hypothesized causal sequence of 23 variables (Table 14, Chapter V) under the assumption that they influence the aspiration and attitudes of the child but are in turn affected by certain more basic family characteristics. The position of FST in the causal ordering is not clearly defined by theory but in the regression analysis it was blocked with IQ, antecedent to the mothers' values for her child and subsequent to family background and the mother's anomia and achievement values.

If a child's IQ score on the Otis-Lennon Mental Ability Test is interpreted as a measure of scholastic aptitude and of the child's current success in acquiring academic skills necessary in a technical society, then one might expect the score to be related directly and/or indirectly to the child's occupational and educational aspirations and expectations. A mother's plans for her child, if she tries to make them realistic, would also take academic skills into consideration. The meaning of the Otis-Lennon IQ score is discussed in some detail in Chapter IV. The authors of the Test Manual (Otis and Lennon, 1969) state that the score can be interpreted as a predictor of academic success but they also stress that results should not be used to curtail educational opportunities of culturally disadvantaged children.

The importance of parent-child interaction, especially the climate of mother-child relationships, in the child's development of self-regard and of motivation for achievement is being increasingly discussed in the literature (e.g., Coopersmith, 1967). Four of the variables in the present study which measure certain aspects of mother-child interaction are based on the child's description of his mother's behavior toward him. These behaviors are grouped and labeled as Loving (LV), Demanding (DM), Punishing (PU), and Communication (COM). Two variables are based on the mother's choice of characteristics desired in her child which are reflected in the factors labeled outgoing (OUT) and character (CHA). The influence of these variables on the child's self-concept (SEL) and on his academic motivation (AC) will be of particular interest.

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In the following sections the effect of each of these variables on those which follow in the causal model and the ways in which each is affected by those which precede it will be examined. The measures of the strength of the relationships between variables are the standardized partial regression coefficients, and interpretations will be based primarily on significance levels and on patterns among the coefficients rather than on the numerical values themselves.

Children's IQ Scores and Relationships with Other Variables

It was difficult to place the variable IQ, as measured on the Otis-Lennon Test, at any particular location in the hypothetical causal sequence since its relationships with several of the study variables are undoubtedly two-directional. In the final regression analyses, IQ and the firstborn variable (FST) were both placed in Block VIII, dependent on the five descriptive background variables (Mother's Age, Welfare Status, No Husband, Household Size, Family Background) and the two variables measuring mothers' attitudes (Anomie and Achievement Values). They are taken as antecedents of the occupational and educational status projections of both child and mother as well as of certain behavioral and attitudinal variables.

Table 4.1 lists the standardized partial regression coefficients which show the influence of IQ on each of 14 variables after controlling for certain other variables. (The independent variables in each regression equation include all variables in the blocks following that of the dependent variable, as listed in Table 1.1, Chapter VI). Not unexpectedly, relationships with the child's educational projections (ED) and with his academic motivation (AC) are significant for the combined groups and several of the subgroups. However, IQ has a statistically significant effect on the child's occupational aspiration-expectations (OCC) only for the two urban black groups. This finding, as was commented on in Paper 2, may reflect the urban child's knowledge of a greater variety of jobs and the relevance of educational requirements in getting them. The detailed analysis of the antecedents of OCC and ED in Paper 1 shows that IQ also has an indirect effect on both variables through the mother's status projections and through parent-child relations.

Separate from the issue of the relationship between IQ and occupational status projections is the question of the attainability of the occupation named by the child when taking account of that child's IQ level. In order to assess this, an attempt was made to judge for each of the census categories of occupations appearing in Table 4 of Appendix L the minimal level of IQ required for boys to enter such an occupational category. For example, Professional-Technical was estimated at an IQ of 110 and Operative at 80. It turns out that an average IQ score of 96 would be required for the entire study population of boys to attain their aspired occupation and 91 for their expected one. These can then be compared to the average IQ score of 87 for all boys. This difference suggest that there will likely be serious problems for boys in attaining the occupations they aspire to or even getting the ones they expect. Of course, the subjective judgement that, for example, IQ should equal 110 in order to enter a professional technical occupation may be in error.

The influence of the child's IQ on the mother's plans for her child, both occupational (MOG) and educational (MED), is strong and positive. The mothers seem to have a general idea of their children's academic capabilities as related to the requirements for success in certain types of jobs and in pursuing higher education. There are probably reciprocal relationships here; high expectations on the part of the mother may encourage better academic performance on the part of the child while low expectations may have the opposite effect. These possibilities have also been discussed in Paper 2.

Another set of variables which shows significant dependence on IQ is the group describing the mother's behavior as perceived by the child. For boys there is a strong positive relationship between IQ and loving behavior of the mother (LV) and a strong negative relationship between IQ and mothers' punishing behavior (PU). Also, high IQ scores tend to be associated with high scores on the variable measuring mother's communication with her child (COM) for both boys and girls, but especially for girls. In order to interpret these associations, it may be helpful to discuss in more detail what is being measured by the four variables LV, PU, DM and COM.

Table 4.1. Influence of Child's IQ on 14 Other Variables: Standardized Partial Regression Coefficients in Hundredths

Variables		All		Urban Black		Rural Black		Rural White	
Dep.	Indep.	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
OCC	IQ	7	2	17+	20*	6	2	2	- 6
ED		16**	11*	18*	13	2	14+	20**	9
AC		11*+	9*	17*	5	- 2	17*+	12*	8
MED		18**	15**	20*+	17*	13+	16*	14*	8
MOC		14**	23**	26**	31**	9	16*	15*	20**
SEL		10*	1	18*+	- 1	7	12+	4	- 5
FATK		3	1	8	0	- 7	3	11+	- 4
MOTK		11*	-11*	18*	-14+	- 2	-18*+	17*	- 4
COM		19**	25**	13	30**	7	14+	25**	19*+
PU		-17**	- 7	- 7	8	-20**	- 7	-18*+	-11
DM		- 4	- 4	4	3	- 8	- 8	- 3	- 9
LV		15**	7	18*	9	11+	- 6	13+	12+
CHA		4	9+	- 2	18*	- 1	14*	11+	- 1
OUT		0	4	15+	- 3	- 5	- 4	- 6	9

Significance levels: ** = .005 or less, *+ = .01 to .006, * = .05 to .02,
+ = .10 to .06

The first three measures of mother-child relationships--Loving, Demanding, and Punishing--were derived from the child's responses about his mother on the 45-item Bronfenbrenner Parent Behavior Questionnaire. The fourth measure of maternal behavior, Communication, was the child's score on a scale of five items dealing with the amount of verbalization and type of decision making between mother and child. The items in each category are listed below. The possible responses to most of the items were: Always, Most of the Time, Sometimes, Hardly Ever, Never. (See Appendix A.)

Loving: I can talk to her about anything. She is happy to be with me. She makes me feel good and helps me when I have troubles. She says nice things about me to other people. She says nice things to me when I do something good. She teaches me things that I want to learn. She goes on pleasant walks and trips with me. She wants me to run errands or do favors for her. She helps me with my hobbies or things I like to do. She enjoys talking with me. She wants me to keep my own things in good order. She helps me with my school work when I do not understand something. She wants me to help around the house or yard.

Demanding: When I go someplace for the first time, she comes with me to make sure everything goes well. She says that I have to get her permission first when I want to go somewhere or play with my friends. She makes me work hard on everything I do. She is fair when she punishes me. She seems to be upset and unhappy when I do not behave myself. She worries and is afraid that I cannot take care of myself. She wants to know exactly how I spend my money when I want to buy some little thing for myself. She tells me that I have to do better than other children. When I have to do something for her she explains why. She makes me feel ashamed when I am bad. She tells me I can't roam or wander around because something might happen to me. She tells me exactly when I should be home. When she punishes me, she explains why. She tells me, "I don't want to have anything more to do with you", when I do not behave myself.

Punishing: She punishes me by sending me out of the room. She tells me that other children behave better than I do. She slaps me. She punishes me by making me do extra work. She punishes me by not letting me play with other children. She pesters me and keeps telling me to do things. She spanks or hits me. She punishes me by not letting me do things I really enjoy. She punishes me by sending me to bed early. She tells me I am bad and yells at me. She says she will spank or hit me if I am bad. She punishes me by taking my favorite things away.

Communication: When she punishes me, she tells me why, if I don't know. When she decides things or makes rules for me, she tells my why. When I do something she doesn't like, she talks to me and explains or reasons with me, instead of punishing me. Does she let you decide things for yourself more than she did a year or two ago? How are most things decided between you and your mother?

Siegelman (1965) described the factors of Loving, Demanding, and Punishment as follows:

> Factor I, labeled "Loving", depicts a parent who is readily available for counsel, support, and assistance. This parent enjoys being with his child, praises him, is affectionate, concerned, and has confidence in him.
>
> Factor II, "Punishment," shows the greatest amount of consistency on the scale factor loadings. This factor characterizes a parent who often uses physical and non-physical punishment with little

> concern for the feelings and needs of his child, and frequently for no apparent reason. Although rejection or hostility by the parent is not explicitly noted in the items, it is strongly suggested.
>
> A controlling, demanding, protecting, and intrusive parent is depicted in Factor III, "Demanding." This parent insists on high achievement, explains to his child why he must be punished when such discipline is necessary, and becomes emotionally upset and distant when the child misbehaves (p. 168).

The Communication items were modified from questions used by Elder (1962) with older students. He labeled the items "Independence Training" because he felt that the more a mother explains, reasons, and talks about decisions with her child, the more likely it is that the child is being prepared for responsibilities of independent adult life. Some investigators use the phrase Independence Training with different connotations so the acronym COM is used in this study to stress the element of explanations and verbalizations since four of the five items deal with this aspect of the mother's behavior. One reason for including the five-item COM variable was to ascertain its relationship to the Bronfenbrenner variables.

It is clear from an examination of the individual items making up these four scales that there are similarities in some of these measures. Table 4.2 lists the partial correlation coefficients between pairs of the variables after adjustment for 11 background variables. Loving and Demanding, Loving and Communication, Demanding and Punishing, and Demanding and Communication are strongly and positively related pairs of variables. Loving and Punishing, however, are significantly related in the positive direction in only one group (rural black boys), while Punishing and Communication are significantly related in the positive direction in no group. The positive relationships between Loving and Demanding and between Punishment and Demanding are not unexpected from a psychological standpoint and from study of the items making up these factors.

Table 4.2. Partial Correlation Coefficients[/a] for Variables Measuring Child's Perception of Mother's Behavior

	All		Urban Black		Rural Black		Rural White	
Variables	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
LV and DM	.52**	.56**	.55**	.56**	.48**	.64**	.51**	.47**
LV and PU	.06	-.06+	-.02	-.15*	.15*	.03	.01	-.12*
LV and COM	.41**	.39**	.46**	.38**	.37**	.42**	.43**	.38**
DM and PU	.36**	.22**	.35**	.10	.43**	.29**	.30**	.22**
DM and COM	.33**	.35**	.33**	.25**	.32**	.43**	.36**	.31**
PU and COM	.04	-.05	.02	-.03	.06	.00	.03	-.13*

Significance levels: ** = .005 or less, *+ = .01 to .006, * = .05 to .02,
+ = .10 to .06

[/a] Adjusted for CHA, OUT, FST, IQ, ACV, ANO, FBK, HOZ, NOH, WEL, MOG

The overall preponderance of positive correlation coefficients shows either that mothers who are active in one area tend to be active in all or it may arise from a response set or response bias by the children. It is likely that both phenomena occur. The only variable with low or possibly negative association is punishing, and it is tied into the cluster of LV, DM and COM by way of DM. That is, punishing and demanding behaviors tend to occur together or to be absent together, whereas punishing behavior is not affected or is even less when the other two types (LV and COM) are at higher levels.

This link between PU and DM is notably less for girls than for boys in all sub-cultures. In general the isolation of punishing behavior from the other three is more extreme for girls than for boys. This suggests the presence of a cultural norm to the effect that punishment for girls excludes loving behavior, while boys may perceive loving behavior as well as punishing behavior from the mother. Table 2 of Chapter V shows that girls tend to report slightly higher levels of all types of mother's behavior except for punishing. This finding is remarkably consistent over the three study sub-groups.

In general, the pattern of interrelationships among the four variables shown in Table 4.2 is almost identical for the three sub-cultures. This finding was also reinforced by factor analyses carried out on the individual items which showed that the same four variables (LV, DM, PU, and COM) appeared as factors in all sub-cultures. It suggests that we are dealing with four fundamental dimensions of mother's behavior as seen by the child, in that they seem to be universals even for these quite distinctive families (obviously non-upper middle class, American families).

Likewise, the data in Table 4.1 on the influence of IQ on these four variables show fairly consistent sub-cultural similarities. The child who has lower IQ reports also a lesser degree of mother's communications and of loving behavior but a higher degree of punishing behavior. This punishment regime is more pronounced for the lower IQ boys than for girls and also is associated with IQ somewhat more in the rural areas than the city, although these latter differences do not attain statistical significance.

While it may be true that IQ level tends to increase, all things being equal, under a climate of loving behavior, it is also strongly suggested that children who function at a higher IQ level thereby get more loving behavior and avoid punishment. It is logical that a mother might spend more time explaining her behavior when the child has a higher IQ. Whether in fact mothers do behave in the ways their offspring say they do is still a moot point but the children themselves seem to perceive their mothers as reacting negatively to low IQ.

There is some evidence that IQ is also one of the factors contributing to a boy's self-esteem (SEL) although the direct relationship is strong only for urban black boys. Since self-esteem depends strongly on all four maternal-behavior variables, IQ does thereby have an indirect effect on self-esteem. All of this simply says that children who have the abilities captured in the IQ score tend to realize that they do have such abilities.

A sex difference arises with the effect of IQ on reports of talking with mother about future job or schooling. Whereas boys with higher IQ report more talks with their mothers, girls with higher IQ report fewer. Possibly when the boy has shown more ability the mother encourages talking about his career future, but this may not be true for a bright girl. There may not be enough money to send her to school or not enough interest in a career for her daughter to encourage the mother to talk with her. On the other hand if the daughter has low ability, the mother may feel a disinclination to discuss a career. Of course, we do not know the content of the actual discussions so we should perhaps limit the inferences even more.

Table 4.3 lists the standardized regression coefficients of IQ on the five family status variables and on the two mother's attitudinal measures, anomia and achievement values. The values of R^2, the square of the multiple correlation coefficient, indicate that these seven variables account for a significant amount of the variation of IQ scores for all groups except the urban black girls. This is due in large part to the dependence of IQ on the composite family background variable (FBK), a measure of relative status in the context of a low socioeconomic level of living for all families. This family background variable includes parents' educational and occupational status along with several other measures and in these generally low-income sub-cultures, it may be an indication of how closely the family environment is approaching middle-class status. Table 4.3 also shows that mothers with high achievement values (ACV) and low anomie (ANO) tend to have children with high IQ scores.

Table 4.3. Dependence of IQ on Seven Variables: Standardized Partial Regression Coefficients in Hundredths.

Variables		All		Urban Black		Rural Black		Rural White	
Dep.	Indep.	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
IQ	ACV	9*	13**	2	16	6	32**	15*	5
	ANO	- 8*	- 2	-11	- 1	-14	5	- 5	- 3
	FBK	24**	23**	29**	1	19*+	17*	25**	40**
	HOZ	- 5	- 9**	0	- 8	- 2	- 7	-12*	-12*
	NOH	- 2	- 2	- 6	-11	1	0	- 1	2
	WEL	- 2	- 3	-16*	2	7	- 8	2	0
	MOG	4	1	11	5	1	0	3	0
R^2		.131**	.152**	.184**	.045	.086**	.163**	.180**	.251**

Significance levels: ** = .005 or less, *+ = .01 to .006, * = .05 to .02,
+ = .10 to .06

In terms of the nature-nurture controversy or the task of separating genetic effects on IQ from the environmental effects these data are not very useful. The fact that ACV and ANO do show some effects on IQ even after adjustment for schools, which removes race and residence differences, and after adjustment for FBK does argue for the influence of environment. That is, mothers who hold certain attitudes seem to be able to influence their offspring's IQ.

Among the variables based on household characteristics in Table 4.3, larger household size (HOZ), and being on welfare (WEL) tend to be associated with lower IQ scores for some groups, but the relationships are not strong nor consistent over all sub-cultures.

Relationships of Firstborn Variable with Other Variables

The variable concerning the ordinal position of the child (FST) was scored one if the child was an only child or the oldest and zero otherwise. The position of FST in the causal ordering is not clearly defined by theory, but in the regression analyses it was blocked with IQ, antecedent to the mother's values for her child and subsequent to family background and the mother's anomia and achievement values.

Table 4.4 shows the standardized partial regression coefficients of 14 variables in their dependence on FST. Significant relationships are sparse. Firstborn boys tend to report more talks with parents about plans than other children while firstborn girls and their mothers have higher career plans. Among the sub-cultures, rural black boys show positive relationships between FST and OCC, MED, and MOC. Rural white girls show significant positive effects of FST on OCC and FATK. Negative relationships for rural black girls between FST and MOTK and the maternal-behavior variables of Loving and Demanding may indicate a difference in mother-daughter interaction for this group of firstborn children, particularly in contrast to the urban black girls.

Table 4.5 shows the dependence of the firstborn variable on seven background variables. The regression coefficients of FST on household size and mother's age are significant and negative as expected. The partial correlation coefficients between IQ and FST, after controlling for the seven background variables, are not significant.

Table 4.4. Influence of FST on Fourteen Other Variables: Standardized Partial Regression Coefficients in Hundredths

Variables		All		Urban Black		Rural Black		Rural White	
Dep.	Indep.	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
OCC	FST	6	9*	- 2	- 9	15*	3	3	24**
ED		0	- 5	5	- 5	8	- 6	- 4	- 6
AC		- 1	- 2	- 4	- 6	- 6	- 4	5	2
MED		4	1	5	11	17*	2	- 8	- 6
MOC		5	8*	3	8	13*	5	- 4	7
SEL		- 4	4	6	3	- 6	9	- 9	1
FATK		8+	2	- 1	-11	12+	- 6	6	13*
MOTK		8*	3	14+	9	6	-16*	4	10
COM		- 1	1	- 5	13	- 2	- 9	2	0
PU		3	- 2	16+	8	- 4	- 6	3	- 4
DM		2	- 3	3	13	3	-19*+	3	2
LV		- 4	- 4	- 9	10	1	-16*	- 4	- 3
CHA		0	4	9	- 4	0	2	- 6	11
OUT		- 3	- 1	- 6	15+	0	- 3	- 1	- 9

Significance levels: ** = .005 or less, *+ = .01 to .006, * = .05 to .02, + = .10 to .06

Table 4.5. Dependence of FST on Seven Other Variables: Standardized Partial Regression Coefficients in Hundredths

Variables		All		Urban Black		Rural Black		Rural White	
Dep.	Indep.	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
FST	ACV	- 9*	- 8	6	- 4	-12	-11	-13*	- 7
	ANO	2	- 2	19*	- 6	- 4	- 4	- 3	2
	FBK	- 1	- 3	- 6	- 8	- 1	0	- 1	- 3
	HOZ	-45**	-42**	-45**	-42**	-40**	-36**	-45**	-39**
	NOH	- 5	-10*+	-13+	- 7	3	- 9	- 6	-11
	WEL	- 4	1	- 2	4	-12+	10	1	- 5
	MOG	-28**	-29**	-16*	-25**	-28**	-30**	-35**	-31**
	R^2	.242**	.206**	.244**	.231**	.253**	.183**	.289**	.248**
Partial Corr. IQ and FST		-.02	.03	-.00	.10	-1.0	-.11+	.01	.09

Significance levels: ** = .005 or less, *+ = .01 to .006, * = .05 to .02,
+ = .10 to .06

Relationships of Maternal Behavior Variables with Other Variables

The effects of the three Bronfenbrenner variables and the Communication variable on the child's and mother's educational and occupational status projections and on the child's academic motivation, self-concept, and reports of talking with parents about plans are shown in Table 4.6. The most striking results of these regression analyses are the strong positive effects of loving and demanding and the strong negative effect of punishing on the child's self-concept (SEL). The relationships are significant for both boys and girls and for most of the subgroups. The communication-with-mother variable is also positively related to self-concept for some groups although results are not as strong nor consistent as with loving and demanding. This may be due in part to the strong intercorrelations among these three variables.

Another variable which is dependent on some of the maternal behavior variables is the academic motivation of the child (AC). The variables loving, demanding, and communication are positively related to academic motivation for both boys and girls. Patterns vary in the subgroups but each shows a significant relationship between AC and some aspect of mother-child interaction as perceived by the child.

Table 4.6. Influence of Loving, Demanding, Punishing and Communication Variables on Eight Variables: Standardized Partial Regression Coefficients in Hundredths

Variables		All		Urban Black		Rural Black		Rural White	
Dep.	Indep.	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
OCC	COM	3	6	0	7	- 5	10	13+	3
ED		- 4	7+	12	5	1	10	-16*+	0
AC		7+	8*	1	22**	10+	9	6	-11+
MED		- 1	- 6	- 8	- 8	1	- 8	1	- 3
MOC		1	1	- 1	8	3	- 7	1	1
SEL		8*	6	16*	21*+	10	- 5	0	5
FATK		6	3	3	- 2	9	- 8	6	13*
MOTK		9*	10*	10	11	1	1	14*	7
OCC	PU	- 2	1	13	0	-10	9	- 3	- 6
ED		2	- 6	0	2	0	- 4	1	-11+
AC		3	- 5	-13+	-13*	7	0	11+	- 5
MED		3	- 1	9	- 4	- 2	- 2	2	0
MOC		- 7+	- 1	- 6	3	- 4	- 7	- 5	0
SEL		-21**	-29**	- 8	-24**	-20**	-25**	-30**	-36**
FATK		0	6	8	6	- 9	16*	5	1
MOTK		7+	2	7	2	15*	4	4	- 2
OCC	DM	8+	0	- 7	- 3	17*	- 6	8	8
ED		4	2	1	2	3	11	7	2
AC		13**	10*+	25**	6	6	30**	12+	9
MED		- 6	- 6	- 8	12	-10	- 6	- 1	-14*
MOC		2	0	- 7	- 9	- 2	4	13+	6
SEL		11*+	19**	8	18*	9	31**	13*	14*
FATK		6	- 2	17+	- 8	0	8	4	- 9
MOTK		1	3	- 3	-16+	- 5	14	7	2
OCC	LV	2	- 1	9	1	8	- 6	- 6	- 1
ED		5	- 5	-14	- 4	17*	-13	7	- 6
AC		7+	12**	6	5	5	10	12+	21**
MED		2	1	15	-14	0	5	- 2	5
MOC		3	4	10	- 5	10	8	- 5	5
SEL		31**	18**	33**	0	34**	22*+	27**	24**
FATK		13**	14**	5	14	20*+	12	15*	17*
MOTK		20**	22**	35**	36**	18*	25**	13+	14*

Significance levels: ** = .005 or less, *+ = .01 to .006, * = .05 to .02,
+ = .10 to .06

As a group, the four variables LV, DM, PU and COM account for a large proportion of the total sum of squares due to the regression of SEL on the 17 variables in Blocks V through X and of AC on the 20 variables in Blocks III through X. The percentages are given in Table 4.7. For example, for all boys, 78% of the sum of squares due to the regression of SEL on the 17 variables from MOG through FATK in the causal sequence can be attributed to LV, DM, PU, and COM.

Table 4.7. Percent of Total Regression Sum of Squares for Self-Concept and Academic Motivation Due to Loving, Demanding, Punishing, and Communication

Dependent Variable	All		Urban	Black	Rural	Black	Rural	White
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
SEL	78.0	87.3	64.9	62.0	71.1	90.7	69.9	73.7
AC	48.5	58.2	48.5	59.7	43.3	61.5	42.2	48.4

Children who rate their mothers high on the loving scale report more talks with mother (MOTK) and with father (FATK) about job and school plans. There are also significant relationships between the communication variable and MOTK.

The four variables measuring mother's behavior show little direct effect on the child's occupational and educational plans (OCC and ED) nor on the mother's occupational and educational plans for the child (MOC and MED). Their effects are indirect through their strong relationships with SEL, AC, MOTK and FATK. The point was made in Paper 1 that, because of the lack of evidence of direct effect, these characteristics of the mother's behavior may in reality not be so important in fixing their children's status projections. Another viewpoint holds that OCC and ED are far from perfect indicators of a child's status projections and perhaps SEL and AC contain valuable components of status striving themselves, even if they are not stated in the concrete terms of years of schooling or levels of job prestige. Under this view one can recommend that mothers apply liberal doses of loving and even demanding with frequent communicating at a reasoning and rational level of discourse, but go cautious with punishing, if they want their children to have high self esteem and to be academically motivated.

Examination of Table 4.8, showing the dependence of Loving, Demanding, Punishing and Communication on the eleven preceding variables in the causal model, does not reveal many clear-cut patterns of relationships. Boys with higher IQ scores tend to rate their mothers high on the Loving scale and low on the Punishing scale, while the effect of IQ on Communication is strong and positive for both boys and girls. Boys' mothers with high achievement values also tend to be perceived as more Loving.

It is not surprising to find that, for boys at least, Communication decreases as household size increases, but an inverse relationship between Family Background and Communication is harder to explain. Absence of the husband in the

Table 4.8. Dependence of Communication, Punishing, Demanding, and Loving on 11 Other Variables: Standardized Partial Regression Coefficients in Hundredths

Variables		All		Urban Black		Rural Black		Rural White	
Dep.	Indep.	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
COM	CHA	4	- 3	6	3	3	- 4	4	- 9
	OUT	11*+	- 2	21*	6	7	- 6	8	- 8
	FST	- 1	1	- 5	13	- 2	- 9	2	0
	IQ	19**	25**	13	30**	7	14+	25**	19*+
	ACV	4	7	- 2	10	4	11	5	5
	ANO	0	1	- 2	6	- 6	- 1	5	4
	FBK	-15**	- 2	- 4	- 4	-16*	- 5	-16*	7
	HOZ	-18**	- 5	-20*	- 1	-20*+	- 4	-11	- 9
	NOH	- 3	- 5	- 4	-19*	- 4	- 3	- 2	5
	WEL	5	1	1	10	7	6	6	- 8
	MOG	- 6	6	-13+	10	- 6	- 1	- 4	8
	R^2	.064**	.060**	.095	.168*+	.058	.040	.078*	.086*+
PU	CHA	2	12*+	10	12	- 5	7	- 2	15*
	OUT	7	13**	19*	12	3	12+	- 3	14*
	FST	3	- 2	16+	8	- 4	- 6	3	- 4
	IQ	-17**	- 7	- 7	8	-20**	- 7	-18*+	-11
	ACV	- 3	1	- 1	1	- 3	- 6	0	5
	ANO	- 3	5	-13	3	2	7	1	2
	FBK	1	1	1	12	-12	4	15*	- 1
	HOZ	7	9*	20*	20*	-11	1	18*+	12+
	NOH	8+	1	1	6	10	2	11+	- 3
	WEL	- 4	0	0	- 4	- 5	3	- 2	- 2
	MOG	- 5	- 9*	4	-15+	- 8	-10	- 9	- 5
	R^2	.036*+	.039*+	.077	.105+	.099*	.035	.084*	.060+
DM	CHA	2	- 1	5	0	- 6	- 2	5	0
	OUT	3	8+	8	6	0	12	1	4
	FST	2	- 3	3	13	3	-19*+	3	2
	IQ	- 4	- 4	4	3	- 8	- 8	- 3	- 9
	ACV	9+	6	- 1	0	10	11	12+	5
	ANO	2	3	-10	- 3	2	9	10	4
	FBK	- 4	- 2	1	- 3	3	- 1	- 9	3
	HOZ	- 7	2	-15+	9	- 8	- 4	4	4
	NOH	7+	- 3	- 3	- 8	13+	0	11+	- 1
	WEL	- 2	8*	10	13	- 4	0	- 7	14*
	MOG	- 7+	- 4	- 8	7	5	- 7	-18**	- 7
	R^2	.024	.019	.055	.045	.043	.060	.070*	.034

Table 4.8. Continued.

Variables		All		Urban Black		Rural Black		Rural White	
Dep.	Indep.	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
LV	CHA	- 4	- 6	- 2	- 3	- 9	- 2	1	-11
	OUT	- 1	4	0	2	- 5	4	1	3
	FST	- 4	- 4	- 9	10	1	-16*	- 4	- 3
	IQ	15**	7	18*	9	11+	- 6	13+	12+
	ACV	15*+	1	10	-16	19*	8	12	12
	ANO	6	- 2	- 4	- 4	13	9	8	- 6
	FBK	- 9+	2	2	6	- 3	4	-15*	- 8
	HOZ	- 8+	- 7	-18*	-10	- 6	-11	0	- 2
	NOH	2	- 5	- 5	-12	3	-10	7	3
	WEL	- 1	4	7	7	- 1	4	- 5	1
	MOG	- 3	- 2	- 7	16*	8	-10	-12+	- 5
	R^2	.035*	.021	.-86	.083	.048	.043	.048	.058

Significance levels: ** = .005 or less, *+ = .01 to .006, * = .05 to .02,
+ = .10 to .06

family increases punishing behavior of mothers of boys, while a larger number of persons in the household has a similar effect on mothers of girls. It seems plausible to expect a mother who favors an outgoing child to be rated high on Communication with her child; this is true for all boys and especially for urban black males. Reasons for the strong positive relationships between a mother favoring an outgoing child (OUT) or a child with character (CHA) and the Punishing variable for girls are not clear.

Characteristics Which Mothers Value in Children

Another aspect of the mother-child relationship is shown by the mother's view of the ideal child, as expressed by her choice of traits which she considers most desirable. Responses of the mother to certain items of Kohn's Parental Values scale were combined for scores on the two variables labeled OUT for "mother values outgoing child" and CHA for "mother values child with character". As commented on in Chapter V, scores on these two scales are negatively correlated with each other and with scores on a third scale labeled polish (POL, mother values child with polish) which was not used in the final regression analysis. Traits valued by the mother that made up the variable labeled CHA were: Tries hard to succeed; is able to defend self; has self-control; is honest; is dependable. Traits that made up the variable labeled OUT were: Gets along well with other children; is affectionate; is happy, is considerate of others; is interested in why and how things happen.

The standardized partial regression coefficients of twelve variables on OUT and CHA are shown in Table 4.9. It is of interest that mothers who favor outgoing children as well as mothers who favor children with character tend to have children with high occupational aspirations-expectations (OCC). For mother-daughter pairs, high scores on either OUT or CHA tend to be associated with high Punishing scores. Mother-son pairs show strong positive associations between OUT and the Communication variable (COM) and between CHA and mother's educational plans for the child (MED).

Table 4.9. Influence of Mother's Values on Twelve Other Variables: Standardized Partial Regression Coefficients in Hundredths

Variables		All		Urban Black		Rural Black		Rural White	
Dep.	Indep.	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
OCC	CHA	13**	8+	12	4	15*	17*	10	0
ED		5	- 1	- 2	-16+	7	7	8	- 1
AC		- 5	0	- 9	12+	- 3	- 1	- 7	- 8
MED		12**	5	9	13+	9	3	12+	1
MOC		0	5	- 1	- 3	4	10	- 5	6
SEL		3	- 3	- 8	0	- 2	2	10	- 8
FATK		- 2	- 3	- 8	2	8	- 3	-15*	- 7
MOTK		1	0	6	- 1	1	- 2	- 6	3
COM		4	- 3	6	3	3	- 4	4	- 9
PU		2	12**	10	12	- 5	7	- 2	15*
DM		2	- 1	5	0	- 6	- 2	5	0
LV		- 4	- 6	- 2	- 3	- 9	- 2	1	-11
OCC	OUT	13**	9*	18+	7	15*	15*	8	5
ED		5	2	- 4	-10	- 3	5	11+	4
AC		- 5	- 2	- 3	5	- 2	- 8	-10+	- 5
MED		5	1	17+	- 1	1	4	- 1	- 3
MOC		4	2	2	- 3	4	5	4	1
SEL		5	- 1	3	- 4	9	- 3	2	- 2
FATK		- 4	- 4	-12	- 1	- 4	- 2	- 3	- 8
MOTK		0	- 2	0	- 2	1	- 4	- 3	- 2
COM		11*+	- 2	21*	6	7	- 6	8	- 8
PU		7	13**	19*	12	3	12+	- 3	14*
DM		3	8+	8	6	0	12	1	4
LV		- 1	4	0	2	- 5	4	1	3

Significance levels: ** = .005 or less, *+ = .01 to .006, * = .05 to .02,
+ = .10 to .06

Table 4.10 lists the standardized partial regression coefficients of both OUT and CHA on the nine variables preceding them in the causal sequence as well as partial correlation coefficients and coefficients of determination. The small values of R^2 indicate that relationships are not strong. Family Background has a positive effect on OUT for the rural white mothers. High achievement values scores (ACV) of the mothers are associated with a desire for children with character for the rural white groups but with a desire for outgoing children for the mothers of rural black girls.

Table 4.10. Dependence of Mother's Values for Child on Nine Other Variables: Standardized Partial Regression Coefficients in Hundredths

Variables		All		Urban Black		Rural Black		Rural White	
Dep.	Indep.	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
CHA	FST	0	4	9	- 4	0	2	- 6	11
	IQ	4	9+	- 2	18*	- 1	14*	11+	- 1
	ACV	17**	11*	8	- 1	10	3	23**	19*+
	ANO	8+	- 1	11	-13	- 3	-14+	8	-12+
	FBK	1	- 6	5	6	12	- 1	- 7	-12
	HOZ	1	11*	7	4	- 2	18*+	0	3
	NOH	1	8+	- 3	20*	7	4	- 2	5
	WEL	- 1	- 2	- 4	-12	- 2	1	1	1
	MOG	9*	2	1	0	23**	2	2	2
	R^2	.028*	.023+	.027	.082	.067+	.067+	.057+	.040
OUT	FST	- 3	- 1	- 6	15+	0	- 3	- 1	- 9
	IQ	0	4	15+	- 3	- 5	- 4	- 6	9
	ACV	- 3	11*	- 2	14	- 2	27*+	0	0
	ANO	-11*	- 4	-17+	7	- 2	- 3	- 8	-11
	FBK	12*+	14**	8	7	- 5	1	21**	24**
	HOZ	3	- 3	1	6	1	- 4	4	- 4
	NOH	3	- 8+	14+	-16+	-14*	- 8	7	- 6
	WEL	2	6	3	3	14*	14*	- 2	3
	MOG	- 3	4	2	3	- 6	1	- 6	5
	R^2	.028*	.057**	.097*	.059	.034	.066+	.063*	.122**
Partial Corr. CHA and OUT		-.49**	-.47**	-.48**	-.43**	-.33**	-.41**	-.60**	-.52**

Significance levels: ** = .005 or less, *+ = .01 to .006, * = .05 to .02,
+ = .10 to .06

Summary

One of the important results of this study of 1,412 mother-child pairs is the demonstration of a strong relationship between the child's perception of his mother's behavior toward him and the child's self regard. The positive influence of loving and demanding and the negative influence of punishing on self-concept are evident for both boys and girls. Degree of communication between mother and child plays a lesser role. There is also some direct effect of mother's behavior on the academic motivation of the child as well as indirect effects through the strong relationship with his self-concept. Although it seems evident that a punishing non-demanding and non-loving mother will depress self-esteem of her offspring, it is possible that children who have high self-esteem may just perceive any of their mothers' behavior as loving and demanding but not as punishing.

The fact that the two variables describing the mother's image of the ideal child, outgoing and having character, are positively related to the child's occupational status projections provides further evidence of the mother's influence on the child. Relationships between these two variables and certain of the mother's behavioral variables suggest that the mother's behavior to her child may be affected by her ideals for the child.

There is some evidence that firstborn children and their mothers have higher occupational status projections than other groups. There are also significant relationships between being firstborn and reports of talking to mother and father about plans.

Although the relationships discussed in this paper differ in strength and detail among subgroups, the general patterns for boys and for girls are consistent. The results of this study show that mother's behavior as perceived by the child affects the child's self-concept, academic motivation, and talking to mother or father about plans for the future and is in turn influenced by the mother's values, the child's academic ability, and to some extent by family structural variables. The academic ability (IQ) of the child is related to a number of the variables, but of particular interest are the strong relationships with educational projections of the child and with both educational and occupational projections of the mother for the child.

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CHAPTER VI

FINDINGS FOR THE BASELINE STUDY

Paper 5...Status Characteristics of the Mother and the Household as They Affect Other Variables

Since all the households in the study have relatively low income, there is less variation on socio-economic and demographic variables than would be the case if a cross-section of the population had been studied. But in an economically homogeneous sample these variables become even more important in the search for explanations of attitudes and behavior. This paper will examine five such variables--FBK, HOZ, NOH, WEL and MOG (see Appendix C) in their effect on other study variables. Because they are interrelated, it is difficult to separate the effect of one of these variables from the others, even when using partial regression coefficients as in this study. For example, FBK is negatively related to WEL and MOG; that is, households receiving welfare income and with older mothers tend to have lower socio-economic status scores. Also, households without husbands are more likely to receive welfare income and to have fewer members than others.

Family Background

The regression analysis of these status characteristics as independent variables shows perhaps less direct influence of them on the main dependent variables and the other variables in the casual chain than might be expected from previous studies. Family background scores, however, rather strongly influence the mothers' educational projections for their children, particularly for girls and for rural white boys (Table 5.1). Family background also influences their occupational projections for sons but does not show a similar influence on occupational projections for daughters, probably because of the narrow range of occupations the mothers forsee for daughters. There also appears to be a direct influence of family background score in the educational projections of urban black girls, but not on the children's projections in the other groups. These influences of family background seem to be consistent with the often-noted tendency toward inter-generational transmission of socio-economic status, even in such an open-class and achievement-oriented society as the United States. The lack of much direct influence of family background on the children's projections is probably a function of the uniformly high level of these projections, which is in keeping with other recent research showing that high aspirations characterize all class, ethnic, and social categories (Chapter II).

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TABLE 5.1--Influence of Family Background on Other Variables

Standardized Partial Regression Coefficients, in Hundredths, Showing Effects of FBK on All Variables Subsequent to It in the Causal Chain, by Subculture and Sex

Dependent Variable	All		Urban Black		Rural Black		Rural White	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
OCC	1	8+	-4	15+	-2	5	9	6
ED	7	13**	0	32**	4	9	6	3
AC	1	-2	-11	8	1	-8	9	3
MOC	22**	5	10	3	21**	7	25**	5
MED	23**	32**	6	32**	16*	34**	35**	33**
SEL	5	-3	1	2	5	-10	7	-1
MOTK	4	1	-1	-6	11	-3	0	7
FATK	1	3	-11	1	12+	-3	-2	5
LV	-9+	2	2	6	-3	4	-15*	-8
DM	-4	-2	1	-3	3	-1	-9	3
PU	1	1	1	12	-12	4	15*	-1
COM	-15*+	-2	-4	-4	-16*	-5	-16*	7
OUT	12*+	14**	8	7	-5	1	21**	24**
CHA	1	-6	5	6	12	-1	-7	-12
FST	-1	-3	-6	-8	-1	0	-1	-3
IQ	24**	23**	29**	1	19*+	17*	25**	40**

Significance levels: ** .005 or less, *+ .01 to .006, * .05 to .02, + .10 to .06

Family background also appears to influence the IQ scores of the children, except in the case of urban black girls. This topic is discussed in Paper 4. It influences the extent to which rural white mothers say they want "outgoing" children, but does not have such an effect on black mothers. Among rural white mothers, in fact, there is a tendency for the mother's image of the ideal child to shift from emphasis on character to an emphasis on getting along with others (being outgoing) as family background scores rise. Surprisingly, a rise in family background appears to negatively influence the mother's communication with sons, as they perceive it, but has little such effect on daughters.

Household Size

Household size does not show (Table 5.2) an independent, across-the-board influence on any variable, other than the expected tendency for small households to have more first or only children. There is a fairly strong negative influence of household size on the occupational status projections of urban black boys and on the educational projections of urban black girls, but it is not clear why only these particular groups should be so affected, since the feeling is probably widespread that a large number of children in a family makes their attending college less likely. Further research is needed to determine whether the findings in the present study constitute a valid specification of the negative relationship with occupational expectations reported by Haller (1960) and with educational expectations reported by Sperry and Kivett (1964).

The frequency with which children report that their mothers punish them also varies with household size among urban black boys and girls and rural white boys and girls but not rural black boys or girls. It seems logical that physical punishment is such a pervasive norm that number of children makes no difference. There is a negative influence of household size on the frequency with which boys perceive their mothers as communicating well with them, particularly among blacks, urban and rural. There are only slight indications of such an influence among girls. The time that mothers can spend with each child is obviously less in large households, but perhaps girls have more opportunity for communication with their mothers through sharing household tasks.

Mother's Age

The mother's age is negatively related (Table 5.3) to family background, probably reflecting the better education of younger persons. Age has a negative influence on how much mothers value achievement, particularly among rural white mothers. Whether this is a generational difference related to recent societal changes or whether mothers lose their achievement orientation as they grow older should be investigated in future research. Among urban blacks the mother's age seems to influence negatively the daughter's liking for school, and to some extent that of the sons. Why this is true in this group and not in others is puzzling. Similarly, it is not clear why the older rural black mothers should value character so highly in their sons, when such a relationship is not apparent for their daughters or in other groups. Among rural whites, the older the mother, the less likely her son will perceive her as demanding or loving, but among urban blacks the daughters' perception of their mothers as loving seems to increase with the age of the mother.

TABLE 5.2 -- Influence of Household Size on Other Variables

Standardized Partial Regression Coefficients, in Hundredths, Showing the Effects of HOZ on All Variables Subsequent to It in the Causal Chain, by Subculture and Sex

Dependent Variable	All Boys	All Girls	Urban Black Boys	Urban Black Girls	Rural Black Boys	Rural Black Girls	Rural White Boys	Rural White Girls
OCC	-2	6	-20*	-5	2	1	8	11+
ED	1	-9*	5	-28**	4	1	-4	-11+
AC	0	9*	7	4	-6	8	1	14*
MOC	1	2	-5	0	9	-2	-8	8
MED	-10	-6	-12	-11	-4	2	-11+	-6
SEL	-1	-6	1	-1	2	-1	-8	-15*+
MOTK	1	-3	3	15+	2	-7	1	-5
FATK	3	-2	7	-8	-1	7	5	-8
LV	-8+	-7	-18*	-10	-6	-11	0	-2
DM	-7	2	-15+	9	-8	-4	4	4
PU	7	9*	20*	20*	-11	1	18*+	12*
COM	-18**	-5	-20*	-1	-20*+	-4	-11	-9
OUT	3	-3	1	6	1	-4	4	-4
CHA	1	11*	7	4	-2	18*+	0	3
IQ	-5	-9*	0	-8	-2	-7	-12*	-12*
FST	-45**	-42**	-45**	-42**	-40**	-36**	-45**	-39**
FBK	-11**	-12**	0	-7	-11+	-9	-20**	-16**
ACV	-2	-11**	-6	-12	2	-10	-6	-9
ANO	0	8*	7	13+	-5	3	2	7

Significance levels: ** .005 or less, *+ .01 to .006, * .05 to .02 + .10 to .06

TABLE 5.3 -- Influence of Mother's Age on Other Variables

Standardized Partial Regression Coefficients, in Hundredths, Showing the Effects of MOG and All Variables Subsequent to It in the Causal Chain, by Subculture and Sex

Dependent Variable	All		Urban Black		Rural Black		Rural White	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
OCC	6+	4	2	-3	10	-4	2	15*+
ED	-6	-4	4	-3	7	-2	-6	-8
AC	-6+	-6+	-11	-20**	-7	-1	1	0
MOC	-3	0	-10	3	3	-2	5	3
MED	0	-3	-1	-3	4	2	-5	-9
SEL	1	0	-4	7	7	1	-9	-1
MOTK	0	-2	-7	-4	7	-9	-2	2
FATK	-1	-4	-12	-11	9	4	-3	-6
LV	-3	-2	-7	16*	8	-10	-12+	-5
DM	-7+	-4	-8	7	5	-7	-18**	-7
PU	-5	-9*	4	-15+	-8	-10	-9	-5
COM	-6	6	-13+	10	-6	-1	-4	8
OUT	-3	4	2	3	-6	1	-5	5
CHA	9*	2	1	0	23**	2	2	2
IQ	4	1	11	5	1	0	3	0
FST	-28**	-29**	-16*	-25**	-28**	-30**	-35**	-31**
FBK	-20**	-20**	-9	-11	-29**	-24**	-20**	-24**
ACV	-12**	-14**	-12+	-13+	-11*	-4	-15*+	-28**
ANO	4	6	-8	-3	10+	1	7	15**

Significance levels: **.005 or less, *+.01 to .006, *.05 to .02, + .10 to .06

Being on Welfare

Being on welfare seems to exert considerably more influence on other variables among rural whites than among urban or rural blacks (Table 5.4), and the influence is greater for white girls and their mothers than for the boys and their mothers. Perhaps this is due to the greater frequency of being on welfare among blacks than whites in the general society, and therefore blacks on welfare feeling less "different." But even among whites the welfare variable shows little independent influence on the majority of the variables following in the causal chain. Being on welfare is fairly strongly and negatively related to family background and the mother's achievement values among rural whites and there is indication of a weak relationship of this type in the other groups, though the coefficients are mostly non-significant. Among rural white girls and their mothers, welfare negatively influences the mothers' occupational and educational projections and the extent to which the daughters report talking to their mothers about their aspirations and plans, while it increases the mothers' anomia scores. Among rural blacks being on welfare increases the extent to which the mother values an outgoing child and tends to increase the children's educational projections. Among urban blacks it increases the likelihood that sons and daughters will have talked with their mothers about plans. Being on welfare seems to depress the occupational projections of girls and the IQ scores of boys in this group.

TABLE 5.4 -- Influence of Being on Welfare on Other Variables

Standardized Partial Regression Coefficients, in Hundredths, showing the Effects of WEL on All Variables Subsequent to It in the Causal Chain, by Subculture and Sex

Dependent Variable	All Boys	All Girls	Urban Black Boys	Urban Black Girls	Rural Black Boys	Rural Black Girls	Rural White Boys	Rural White Girls
OCC	0	-1	-3	-17*	7	3	-2	5
ED	-4	0	2	-7	11	10	-10+	-6
AC	1	-6+	-7	-6	3	-3	6	-11+
MOC	0	-4	-6	4	5	4	-1	-19**
MED	-3	-7	-12+	-9	2	1	0	-15*
SEL	4	-2	1	3	7	-1	4	-6
MOTK	6	-5	13+	18*	2	2	5	-22**
FATK	-1	0	-9	20**	-1	-3	6	-6
LV	-1	4	7	7	-1	4	-5	1
DM	-2	8	10	13	-4	0	-7	14*
PU	-4	0	0	-4	-5	3	-2	-2
COM	5	1	1	10	8	6	6	-8
OUT	2	6	3	3	14*	14*	-2	3
CHA	-1	-2	-4	-12	-2	1	1	1
IQ	-2	-3	-16*	2	7	-8	2	0
FST	-4	1	-2	4	-12+	10	1	-5
FBK	-14**	-16**	-15+	-5	-4	-11	-23**	-25**
ACV	-16**	-10*+	-21*+	-13	-4	-8	-26**	-13*
ANO	2	12**	-3	1	-6	14*	10	19**

Significance levels: ** .005 or less, *+ .01 to .006, * .05 to .02, + .10 to .06

No Husband

Of the several status characteristics variables, the lack of a husband in the household (NOH) has the least independent effect on other variables (Table 5.5) although it had been heralded as influential by Moynihan (1965) and others. Except for FATK, which has a "built-in" negative relationship to the absence of a husband or father, there are no variables that are influenced across the board by the lack of a husband. Urban black girls and their mothers seem to be more influenced than any other group, with the girls' occupational status projections, their mothers' emphasis on character in child-training, and the mother's level of anomia increased by the lack of a husband, and the girls' self-concept, their perception of the degree of their mothers' communication with them, and their mothers' emphasis on outgoing personality in their children decreased. Since it is among urban blacks that the lack of a husband is more frequent, the fact that it is in these households that the most influence of this variable is apparent is in keeping with the Moynihan thesis. But according to Moynihan the main influence should have been on the boys, while the opposite is true of our data. The expected influence on boys in these households (derived not only from Moynihan but from Parker and Kleiner, 1960, and Kriesberg, 1967) is suggested only by a weak negative influence on the mothers' educational projections for their sons and an increase in their preference for "outgoing" sons. The elevation in girls' occupational aspirations-expections as a consequence of being in fatherless households suggests that greater interest in the work world may develop in girls who see their mothers having to get along alone.

TABLE 5.5 -- Influence of Mothers' Not Having a Husband on Other Variables

Standardized Partial Regression Coefficients, in Hundredths, Showing the Effects of NOH on All Variables Subsequent to It in the Causal Chain, by Subculture and Sex

Dependent Variable	All Boys	All Girls	Urban Black Boys	Urban Black Girls	Rural Black Boys	Rural Black Girls	Rural White Boys	Rural White Girls
OCC	0	10*	-2	27**	0	3	-5	5
ED	1	4	6	6	-6	-4	-3	7
AC	-2	6	3	9	-9	6	4	3
MOC	-3	3	7	1	-7	3	-10	6
MED	-5	8*	-10	4	-4	12+	-4	6
SEL	0	-4	-8	-16+	3	2	5	-5
MOTK	0	7	0	-3	2	5	-1	12+
FATK	-27**	-26**	-22**	-41**	-22**	-23**	-37**	-18**
LV	2	-5	-5	-12	3	-10	7	3
DM	7+	-3	-3	-8	13+	0	11+	-1
PU	8*	1	1	6	10	2	11+	-3
COM	-3	-5	-4	-19*	-4	-3	-2	5
OUT	3	-8+	14+	-16+	-14*	-8	7	-6
CHA	1	8+	-3	20*	7	4	-2	5
IQ	-2	-2	-6	-11	1	0	-1	2
FST	-5	-10*+	-13+	-7	3	-10	-6	-11*
FBK	-4	2	4	12	-15*	-13+	1	10+
ACV	-1	-2	-1	-2	-1	-4	-3	2
ANO	7+	3	10	15+	8	3	3	-7

Significance levels: ** .005 or less, *+ .01 to .006, * .05 to .02, + .10 to .06

Summary

The importance attributed to status factors in previous career research is not necessarily greatly diminished by the present research, but the findings in this study suggest that the process through which such factors exert their influence is considerably more indirect and complex than implied in many studies. Further research will have to be carried out before one can be very certain about the relationships and paths of influence for specific race, sex and residence categories, since some of the findings reported here seem to contradict previous research or do not seem explainable in terms of present knowledge or theory.

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EXPERIMENTAL PHASE

CHAPTER VII

INTRODUCTION AND JUSTIFICATION

This research project differed from most other surveys in one important way: the initial proposal provided for a second phase designed to test certain techniques predicated upon the assumption that the effectiveness of low-income mothers in influencing their children in regard to desirable educational and vocational goals could be enhanced through carefully conducted learning experiences. Toward this end, in the seven states involved in the research, small groups of mothers were asked to participate in three learning sessions concerned with expanding their knowledge of educational and vocational processes considered relevant in enhancing the life chances of their children. The sessions in which these mothers participated were concerned with (1) helping the mothers understand the variety of jobs available and the necessary education and training needed; (2) discussing ways mothers can help their children have the kind of job opportunities to which they aspire by planning early, giving parental support, and fostering independence and feelings of self-confidence; and (3) helping parents obtain and transmit to their children a better appreciation of the value of education and the avenues toward obtaining an education.

In each state a sample of at least 25 mother-child pairs was drawn along with at least 10 mother-child control pairs. A total of 112 mother-child pairs participated in all three sessions. Meanwhile, 98 mother-child pairs participated in the research as controls.

The reader, in subsequent pages, will be provided with the specifics of the three group sessions which were conducted with the experimental mothers. Here suffice it to say that the learning sessions were planned with great care and that the meetings in each state were conducted according to a detailed set of procedures calculated to maximize uniformity and impact on the participants.

Justification of the Experimental Phase. Why did the researchers elect to include an experimental phase, and why did they decide to follow the above sketched model? In broad outline, the researchers were of the opinion that the results of the initial survey of children's educational and occupational aspirations and expectations and of mothers' educational and occupational aspirations and expectations for their children would suggest implications that might be conceptualized as guides to a subsequent experimental phase of the larger research project. Additionally, the research committee had a feeling that survey research is necessarily somewhat static and that the already existing store of theory and survey data needed to be tested in a more dynamic setting, to see whether the relationships really "work" in practice.

During the past several decades there has been a growing awareness that many of the human problems of the nation may be attributable to the structure and functioning of families in subcultural groups that are somewhat outside the

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American mainstream. Young people from these isolated and deprived groups often have difficulty in competing with youth from the mainstream groups in the educational-occupational arena. The present study has focused on three such groups in the South, rural and urban blacks and rural Appalachia whites.

As Brown (1970) has noted, for a number of decades various problems and conditions adversely affecting families have been approached by working with and through parents. Some of the areas in which parent education has been attempted include: parent-child relations, drug abuse, physical and mental disabilities of children, sexual problems, and household management skills. Various types of materials have been used -- television, radio, film strips, slides, paper back books, comic books and others. And parents have been involved in a variety of ways -- as individually, in small discussion groups, classes, and large audiences.

The literature, however, is especially meager in regard to attempts to influence the educational and occupational aspirations and expectations of children. And, as Coleman has indicated in the introductory statement of this report, usually efforts to enhance the life chances of children have focused on adolescents, more especially, on high school students. Despite this situation, theories and previous research in the area of child development strongly indicate that children develop skills, attitudes and value-orientations at an early age. For example, Easton and Hess (1969) have stated that efforts to intervene in the lives of young people should begin at an earlier age than is usually the practice. In their research relating to the development of political attitudes and concepts, they have observed:

> "Our pre-testing . . . suggests that by the time the child has completed elementary school, many basic political attitudes and values have become firmly established. What is even more important, and dramatically contrary to expectations and implications of existing literature, it appears that by the time the child enters high school at the age of 14, his basic political orientations to regime and community have become firmly entrenched so that at least during the four years of high school little substantive change is visible." p. 284

Support for this line of reasoning is also suggested by Bowerman and Kinch (1969). They have observed that as the child grows older, parental influence declines and peer influence increases. They found, for example, that 87.1 percent of a sample of fourth-grade children were oriented toward their parents while 5.9 percent of them were oriented toward their families and 48.1 percent were oriented toward their peers. Thus, the present attempt to influence relatively young children through their mothers appears to be supported by the literature.

Ginzburg has stated (as reported in Gold and Douvan, 1969) that children's development in regard to occupations can be divided into three periods. These are the fantasy period -- up to age 11; the tentative period -- 11 to around the end of the 17th year, and the realistic period, in which rather firm vocational goals are set -- beginning near the end of the 17th year. The decision in the present research to obtain baseline data from fifth and sixth grade children and involve them and their parents in an experiment when they were in the seventh and eighth grades and the tentative period of occupational maturation seems in keeping with this schema.

The researchers attempted to develop a strategy of intervention that would focus upon children in a family setting. The literature indicates that the milieu in which young children are socialized, especially true of the low income, involves the family, kin, neighbors and peers. In a recent study of Appalachian families which had migrated from the mountains of Kentucky to urban areas, Schwarzweller, Brown and Mangalam (1971) stated:

> Beech Creekers generally had acquired their initial jobs from information supplied through the informal network of communication among kin and friends in both the areas of origin and destination.

The order to take cognizance of the crucial importance of the family in the development of basic goals, attitudes and values, the researchers made and executed procedures to capitalize on the role of parents in the development of their children. Specifically they elected to work with and through mothers. It is generally known that a variety of family structures are often found among the subcultures under consideration. But a constant in most such families is the mother. Ideally fathers as well as mothers should have been involved in the experiment, but the realities of the situation indicated that the agency to be employed in the attempt to reach the children should be mothers.

Working with mothers permits the evaluation of results at an early stage. That is, one need not wait until children have completed school and entered the job world in order to assess the merits of the approach attempted here. This is a unique feature of the study and a justification for employing an indirect rather than a direct stimulus for children. On the other hand, a more direct intervention would have given the researchers direct contact with children, but necessarily it would have been limited to a few brief and passing encounters with the subjects.

In the initial period of this research it was assumed that the educational and occupational aspirations and expectations of the children would need to be raised. However, the survey data did not support this assumption: aspirations and expectations were observed already to be high, in many cases unrealistically high. Therefore, the decision was made to focus more on the educational process requisite to occupational preparation than on the expansion of aspirations. In brief, the researchers concentrated their efforts on an experimental model calculated to assist mothers in understanding more fully the educational steps necessary to the preparation for occupations other than those which children from the three subcultures traditionally have entered.

Finally, the researchers had only modest expectations for this experimental phase of the research and the results are perhaps even more modest than had been hoped. Nevertheless and despite the usual constraints of time and money, the researchers believe that the logic of the approach, results, and experiences obtained warrant further implementation on a more comprehensive scale. Perhaps the report which follows will encourage such efforts.

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CHAPTER VIII

Parent Education

Parent education programs designed to help parents develop greater competence in child-rearing tasks have existed in the United States for many decades. This social movement to educate American parents in child rearing arose from two fundamental factors--the growing belief on the part of many that better ways of child rearing existed than those traditionally prescribed and the recognized needs of parents. Brim (1959) defined this movement as "an activity using educational techniques in order to effect change in parent role performance."

Some have termed parent education as only a movement, while others give it professional claim. Brim (1959) has written that because parent education is poorly defined both as to content and method, it cannot claim a firm basis from which to proceed in orderly development. This characteristic may have resulted from the fact that parent education has liberally borrowed from several disciplines--psychiatry, psychology, education, sociology, social work, and anthropology as well as from the fields of mass communications and group dynamics. Therefore, the field lacks a solid frame of reference in theory and practice. Nevertheless, parent education has been concerned with engineering a fundamental change in a major role in American society. That is, with transforming the parental role from one guided by cultural tradition and internalized values to one in which the parent must become his own judge of good and bad, and must seek to develop a highly conscious rationally determined role performance. (Brim, 1959).

Varieties of parent education programs number in the thousands and have been used toward a variety of ends. According to Brim (1959), the primary objectives of parent education programs which are generally acknowledged as successful and of outstanding quality are to make the parent more conscious of his role performance, to make him more autonomous and creative, to improve his independent judgement, and to increase the rationality of the parent's role performance. Brim believes that the effort of such programs is to improve the decision making processes of parents both in the parent's choice of ends in child rearing, and in his selection of actual child training practices. This objective is sought by providing the parent with information both on children and on parents and by providing educational settings in which parents can discuss or individually think through with conscious deliberation the ends they will seek, and the means they will employ.

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Characteristics of Persons Reached by Parent Education Programs

Sex. Brim (1959) concluded that while fathers are not untouched by parent education programs, proportionately more mothers than fathers are reached. According to Witmer's review of the literature up to 1934 (reported in Brim, 1959) about 90 percent of parents who attended parent discussion groups were women. More recently, Rowland, surveying two samples of parents in New Orleans, found that the leadership of educational pamphlets mailed to parents of all first-born children in Louisiana was greater for mothers than for fathers. (Brim, 1959)

In reporting on parent education for low income families, Kraft and Chilman (1966) noted that no fathers were encountered in any program recorded. Even when the leaders were men and the program was built around male interest, few, if any, fathers responded.

Ages of Children. Assumptions that parental behavior during the period of early childhood is more influential on the child's physical and mental health than during later years, has resulted in directing parent education programs more frequently to parents of younger children. This is especially true of those programs using mass media methods of education.

Brim (1959) reported that unpublished data from the Child Study Association of America indicated a decided preponderance over the past 50 years of books for parents which relate to care of the infant and preschool child. However, Witmer's review of discussion group membership showed substantially greater enrollment in groups concerned with pre-adolescense. Contradictory findings were reported from a study of parents attending study groups in Minnesota between 1926 and 1932. This survey showed enrollment about equally divided among study groups centering on preschool, school-age, and adolescent children. With respect to mass media, the Minnesota survey showed that one-half of all mothers enrolled in correspondence courses were studying the age group one to five years and one-third the age group six to eleven years. (Brim, 1959)

Socioeconomic Status. Data spanning a 25-year period clearly demonstrate a direct relationship between socioeconomic status and amount of exposure of parent education activities. Brim (1959) reported that during the period 1926 to 1932, Davis and McGinnis and Anderson studied characteristics of parents attending parent study groups in Minnesota. During that period, two-thirds to three-fourths of the parent education participants were from the upper three socioeconomic classes in a five-class breakdown. Only a fourth were from rural areas. In 1936, Anderson (reported in Brim, 1959) used data from the White House Conference national survey of about 3000 families to compare percentages of each social class exposed to various parent education techniques. He found that exposure to such educational techniques as books, pamphlets, and magazines read, radio talks listened to, articles on child care read in newspapers and magazines, and attendance at child study or discussion groups, varied directly with socioeconomic class. For example, about 80 percent of Class 1 had read books on child care within one year, compared to 27 percent of Class 7; some 66 percent of Class 1 had been members of child study groups, compared to 24 percent of Class 7.

After a 20 year lapse in research of this type, a recent study of 24 mothers found no class differences in reading parent education materials in newspapers and magazines; however, a significant difference favoring middle class mothers in the mention of specific books was found. (White, 1957). Stendler's (1951) data from a smaller sample suggested that lower class parents may more frequently refuse to go to school for parent-teacher conferences.

With renewed emphasis on rehabilitation as a major aspect of social policy and planning, interest was reawakened in the possibility of developing useful parent education programs, which along with other services might be effective in helping low income, culturally disadvantaged families break out of the cycle of defeat, despair, and social isolation (Chilman and Kraft, 1963)

According to Kraft and Chilman (1966), efforts to involve these parents have met with varying degrees of success. Parents at the lowest socioeconomic levels often have deeply imbedded fears and anxieties about public programs of any kind and educational programs in particular, and they are reluctant to participate in any activities associated with such programs. Furthermore, individuals at lower socioeconomic levels are often nonverbal and have difficulty with effective verbal communication. As a result, efforts that employ verbal skills and conventional teaching methods have largely met with failure.

Chilman and Kraft (1963) suggested that because low income families are often reluctant to attend meetings, parent educators must go 75 percent of the way, inviting them through telephone calls and home visits, perhaps beginning with a party, then developing programs which should ideally maintain a kind of open entrance and exit door for members, with these programs available to them for at least two or three years.

Chilman and Kraft (1963) also stressed the value of using local indigenous leadership--leaders who possess such characteristics as a mature capacity for motherliness, a sense of dignity and strength, creativity and flexibility, enthusiasm and energy, the ability to translate intellectual material into practical experiental terms, and an understanding of the psychological and cultural characteristics of the groups. Such local indigenous leaders serve as role models that group members can hope to emulate.

Ongoing "doing" projects such as sewing classes seemed to generate enthusiasm, fairly continuous attendance by more than half of the originally invited group, and incidences of changed behavior in some of the participants. Chilman and Kraft (1963) found that discussion groups went well when members were active participants in planning the program as well as in the discussion itself. Discussions that focused on member-perceived day-to-day problems seemed to be most popular.

A survey reported by Chilman (1964) uncovered no projects with experimental groups which were designed to measure the effectiveness of parent education with low income families, but a few demonstration projects dealt indirectly with the effectiveness of such parent education programs. These demonstrations offered slight or no evidence that parent education was effective in altering attitudes or behavior of low income families.

As reported by Hodson (1970) one of the goals of year long parent involvement activities planned and implemented for the Chambers-Tallapoosa County (Alabama) Head Start from 1967 to 1970 was to provide a means of increasing the parents' understanding of their children and of themselves in relation to their children. From a list of approximately 630 families with children eligible to attend Head Start, 53 percent were asked to become parent group leaders and were assisted in developing leadership skills by graduate students in the Department of Family and Child Development, School of Home Economics, Auburn University, Auburn, Alabama. The agenda for the meetings which were held regularly throughout the year were decided upon by the parents. In order to evaluate the effectiveness of this parent involvement program, a series of studies were made jointly by the Department of Child and Family Development and the Tallapoosa-Chamber County Program. Parents' evaluations of their experience in group meetings indicated that they saw them as valuable and worthwhile. In addition, Hereford's Parent Attitude Scale was adapted and used to measure changes in attitudes of parents toward their children. Results showed measurable changes in the parental attitudes of discussion group participants with more of their scores ranking near the upper end of the scale. Parents who attended the parent-led discussion groups as contrasted to those who had attended none appeared to be more confident of their ability to deal effectively with problems; they viewed their children's behavior more as the result of environmental or parental influences and less as a result of natural, inherent, or predetermined causes; they were better able to accept their children's behavior and needs, and were less likely to reject their children; they were more able to thrust their children and were less likely to feel that their children had to be watched and were not to be trusted (Hodson, 1970).

Methods Used in Parent Education

Hereford (1963) gave consideration to the methods employed in parent education. He maintained that the main educational problem is not information-giving, but one related to the difficulties arising from attitudes, feelings, and emotions. Therefore, he considered the prime goal of parent education to be finding the appropriate method that would lead to attitudinal change and, in turn, to behavioral change. Although he recognized the importance of method, he further stated that no universally effective method exists for educating parents. He outlined three basic methods which have been successful when appropriately applied. These are mass media methods (television, radio, books, pamphlets, magazines, newspapers), individual counseling procedures, and group discussion methods.

The choice of method for parent education programs has not been scientifically studied to determine effectiveness in achieving stated objectives under different conditions of content and clientele. Brim (1959) tentatively concluded that reading materials for parent education had the greatest outreach. Hereford (1963), on the other hand, noted the basic weakness in printed matter. Even though the pamphlet is an efficient way to transmit information, the recipients remain essentially passive, without the participation necessary for attitude change. Another problem with passivity of the recipient occurs with the use of experts as speakers. The experts, not the learners (parents), have the responsibility for selecting program content. Other drawbacks with this approach are expense and lack of trained personnel. An additional problem with both mass media methods and individual counseling procedures is that usually the method and content is directed toward the middle class. This emphasis results in ineffectiveness when applied to lower class cultures (Hereford, 1963).

The group discussion method, frequently used in parent education, is based on two main assumptions. The first is that changes in parenting behavior can occur only when parents are aware of a problem, feel the need for solving it, and when they are provided with an opportunity to deliberate upon methods of attacking and solving the problems. The second assumption is that only when parents feel valued, accepted, and free from threat, when they feel competent and convinced that they can effect changes in their environmental situation, only then will they seek, find, and put into action solutions to their problems (Hodson, 1970).

These assumptions require that parents be organized into small homogeneous groups with similar interests, values, and needs and that competent group leadership be provided by persons who can help them to identify their needs, provide an information input concerning ways to meet the problems and establish an emotional climate in which each person in the group is free to express his ideas and concerns.

The use of group-discussion techniques in parent education was undertaken by the St. Louis Mental Health Association under the leadership of Dr. Margaret Gelden in 1959 (Brim, 1959). This discussion program was used primarily as one of the regular monthly presentations of an elementary school PTA and was centered around a nonprofessional discussion leader. In this study and in Hereford's study the approach proved successful and demonstrated that larger groups do respond to a nonprofessional discussion leader.

Other studies which have successfully used the group discussion method will be presented in the following section on evaluation of parent education programs.

Evaluation of Parent Education Programs

Although there have been scattered attempts to evaluate the effectiveness of parent education programs, such as those reported here, evaluation has come late to this field. In addition, much of the evaluation has been critized as unsound because the evaluation has relied heavily on participant assessment rather than on observations and reports by unbiased and uninvolved observers (Endres and Evans, 1968).

Recognizing that the amount of evaluative research in parent education was practically negligible and that the quality of this small amount tended with a few exceptions to be crude and superficial, Hereford (1963) and his associates set out to develop and establish in a community, a workable method of helping parents in their relations with their children. Their additional goal was to evaluate this method in terms of the resulting attitudinal and behavioral changes. They conducted a four-year study in selected elementary schools in Austin, Texas, between 1955 and 1960, drawing subjects from three schools and assigning them to one of four categories. (1) Experimental Group (parents who attended at least one meeting of a discussion-group series); (2) Lecture Control Group (parents who attended at least one of a series of lectures by experts on parent-child relations, but did not participate in discussions); (3) Nonattendant Control Group (parents who registered for either a discussion group or a lecture series but did not attend: and (4) Random Control Group (parents who did not register for or attend either the discussion group or the lecture series).

The researchers hypothesized that parents who attend a series of group discussion meetings on parent-child relations would show positive change in the measurement of attitudinal and behavioral dimensions and that children of these parents, although not directly involved in the program, would also show positive change in the measurement of the dimension of child behavior. It was further hypothesized that positive change on the part of parents (and their children) would be greater among participants in the discussion groups than among participants of the Lecture Group, Nonattendant Group, or Random Control Group. The researchers also hypothesized that the numbers of discussion meetings attended, the quantity of participation, and the frequency of personal references would all be positively related to the degree of positive change in parents who attended the discussion groups. The group discussion technique was based on that used by the St. Louis Mental Health Association during the 1950's, using nonprofessional discussion leaders who were trained by a series of workshops, limiting the size of the discussion groups to encourage optimum participation, and providing for a series of such programs. On the basis of the data, the authors concluded that the attitudes of parents who attended discussion groups showed significant improvement over those of the control groups.

In a somewhat similar study, Endres and Evans, (1968) examined the effects of a parent education program on knowledge, attitudes, and overt behavior of parents and on the self concepts of their children. Three randomized groups of fourth grade children and their respective parents comprised the experimental, placebo, and control groups. Parents in the experimental group engaged in a series of eight study-discussion meetings which were held at two week intervals and lasted for two hours each. The educational materials of Ethel Kawin were used in this group and such topics as feelings of self and adequacy, understanding of self and others, and constructive attitude toward change were discussed. Relevant films were shown and participants received 26 pamphlets related to the topics discussed. The parents in the placebo group attended three meetings spaced one month apart at which programs included a travelog of Africa, unusual hobbies, and Christmas decorations. The parents in the control group received no treatment. At the conclusion of the study, the data showed that the experimental group parents manifested significantly greater knowledge, but showed no significant difference in overt behavior. The authors did, however, find a prominent attitude difference between those parents who had not had parent education and those who had. The children of parents in the experimental group were significantly different from the other groups in perceiving themselves as doing well in school, being happy, and being satisfied with themselves as they were (Endres and Evans, (1968).

Another recent experimental effort in parent education for vocational choice seems to point to group meetings as one effective technique. A group in Michigan piloted an adult education program called "Career Occupational Guide" built around the theme "youth development through an action program for parents" (Anderson, Mawby, Miller, and Olson, 1965). Materials were provided for parents of all high school students in a multi-county area. The program utilized radio, television, newspapers, direct mailing, small group discussions, and other adult education techniques. The overall objectives were: the transmission of existing knowledge about future occupational opportunities simply and directly to parents: the supplementing of counseling and guidance efforts with youth already established in schools, colleges, and churches: and the setting up of alternative channels for transmission of information to parents on a continuous basis.

Brim (1959) affirmed that the issue of the effectiveness of parent education as a change agent remains unresolved at the present time. He predicted that in the absence of conclusive evidence, the arguments seem likely to continue. Brim further suggested that the involvement of critics of parent education, parent educators, and independent social scientists interested in testing theory in this continuing debate may lead to increased interest and a deeper understanding of parent education as a modern social movement.

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CHAPTER IX

METHODS AND PROCEDURES

The experimental phase design and procedures, including instruments for children and mothers, and the program plans for the mothers attending group meetings were developed by a subcommittee with representation from Alabama, North Carolina, South Carolina and Tennessee. Procedures for implementing the programs and measuring instruments were outlined by the regional committee in accordance with the objectives of the experimental segment of the study. (See Information Series II, Southern Regional Research Project S-63, Program Plans for Group Meetings.)

Objectives

The experimental phase overall objective was to test selected procedures for increasing occupational and educational information among low-income youth and their mothers in three selected subcultures. The ultimate goal was to try to increase the level and/or realism of youth's career aspirations and planning through their interactions with their mothers after the mothers experienced the training programs. The rationale for the subcultures selected (urban and rural black and Appalachian white) and for the experimental design is presented in the Introduction of this publication (p. 2).

These questions, developed in the planning stage of the project, led to the development of the specific experimental objectives.

1. Can the mothers' information, attitudes, and aspirations concerning careers for their children be changed in desirable directions by group program-discussions on the subject?

2. Can the children's information, attitudes, and planning be measurably influenced by the mothers' participation in such sessions?

3. Are group sessions favorably received by mothers to the extent that they become a practical and efficient means of improving the life chances of deprived youth?

Specific objectives derived from the aforementioned questions were used in planning the experimental design procedures.

1. To compare the responses to selected questions on information, attitudes and aspirations for education and vocation of children and their mothers for them before and after the mothers had attended the group sessions, and to compare their responses with those of a control group in which the mothers had had no special treatment.

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2. To design three programs for mothers of children in junior high school age groups (seventh and eighth grades) on educational and occupational information that would:

   a. help the mother identify the unique characteristics of the interests and abilities of her child of this age.

   b. build an understanding that changes in the child's interests and goals are to be expected and are a natural part of the developmental process.

   c. enlarge the mother's understanding and awareness of the world of work, types of occupations, job opportunities, and of the relation between school work and the world of work.

   d. explore possible relationships between the child's dominant interests and abilities and types of possible jobs.

   e. increase the mothers' interest in guiding their children's career planning, their knowledge base and ability to do so, and their group-reinforced resolve to do so.

3. To evaluate the effectiveness of the programs and to ascertain whether the methodology as recorded by observers' in sociogram format stimulated group interaction between the selected experimental mothers.

Selection of Experimental and Control Groups

Children and their mothers surveyed during the baseline phase formed the population from which the experimental sample was selected. In each of the seven states sixty to seventy mother/child pairs were chosen for the experimental phase. From this group a minimum of ten were designated as control subjects according to the procedural guidelines established by the committee. At least 40-50 subjects were chosen for the experimental sample, to insure that at least 25 mothers might attend the experimental group meetings.

Whenever possible in each of the states, the entire experimental sample was drawn from one school and the entire control sample from another. If the number of potential respondents was larger than needed, mother/child pairs were randomly selected from one school. If the total number of available subjects in a particular school was approximately equal to the desired sample [illegible], the entire group constituted the sample.

Random Selection

When the total number of available mother/child pairs in a particular school was more than needed for the sample, random selection was accomplished in the following manner: numbers were assigned to all subjects in each unit; 25 mother/child pairs were randomly drawn for the experimental group and listed according to the order in which they were drawn. By a similar procedure at least 10 control mother/child pairs were drawn. In addition, a pool of reserves was drawn for each group and used in the order drawn to replace any subjects who were not located or who could not participate.

In general, individual participating states followed the guidelines for group selection. A few variations were reported. In one state the "before" interviews included only eleven mothers in the control group, because of a problem in administration of mothers' questionnaires by one interviewer. Some mother/child pairs had to be eliminated from the initial selection because of other problems such as dispersion of baseline respondents into five different schools as a result of court-ordered desegregation (Mississippi--rural Negro population) and widespread busing (South Carolina).

Sample Size

The final regional sample consisted of 112 mother/child pairs in the experimental group with 98 pairs in the control group. In an additional 23 the mothers had only attended two of the group meetings so could not be included in the final analysis. Of the 112 experimental subjects, 47 were from the rural negro subculture, 14 from the urban Negro group, and 51 from the Appalachian rural white population. Likewise, the control group included 28 from the rural negro subculture, 12 from the urban, and 58 from the Appalachian subculture. The small urban representation resulted from one sample group of urban Negroes being unable to complete the study.

The range for the control group was 7-30 subjects. In the experimental group the range for those attending three meetings was 13-21 (See Table 16). The distribution of these experimental and control children by age, sex, grade level, subculture, and state is summarized in Table 17.

Table 16 summarizes the total number of baseline mother/child pairs available or randomly drawn for contact, the number of control and experimental mother/child pairs who completed the before and after-tests, and the number of experimental mothers who responded to the meeting invitations and attended two or three group sessions.

Data Collection

A preliminary step for collecting data for the experimental phase was to establish the working agreements with school administrations, principals and teachers. It had been two years since the baseline data had been collected. Next, it was necessary to check names and locations of subjects who had been contacted during the baseline study and to record changes in addresses, grade and school enrollment. The measuring instruments were shown to the school personnel and the procedures for conducting the group meetings were reviewed. Since most of the school personnel remembered the baseline study and were familiar with the goals and purposes of the research, a thorough explanation of background information was not necessary. Most of the time spent with principals was for scheduling test administration and making arrangements for group meetings.

Administration of Before and After Tests

Data were obtained from children through group administration of questionnaires and from mothers through home interviews. Two survey questionnaires were designed to be administered as the experimental phase before and after-tests to the experimental and control groups of mothers and children. A "Survey of Student

TABLE 16

Experimental and Control Mother-Child Pairs by Subculture and State

SUBCULTURE	STATE	NUMBER OF BEFORE INTERVIEWS		INVITED TO PARTICIPATE IN MEETINGS	GROUPS		
					Experimental (E) Sessions attended		Control (C)
		E	C		3	2	
Rural Negro	Alabama	35	20	28	20	2	7
	Mississippi	25		25	17	1	11
	South Carolina	27	22	27	10	5	10
	SUBCULTURE TOTALS				47	8	28
Urban Negro	Virginia	40(99)*	20	60**	14	1	12
Appalachian	Kentucky			All	13	5	30
	North Carolina	40(89)*	20(75)*	29	21	3	15
	Tennessee		10(16)*		17	6	13
	SUBCULTURE TOTALS				51	14	58
	TOTAL REGIONAL N				112	23	98

* Total number available from which "Before" Interview sample was drawn

** 31 indicated by card or telephone intent to attend

TABLE 17

Age, Sex, and Grade Level of Experimental and Control Children

SUBCULTURE	STATE	GROUP	SEX		AGE						GRADE LEVEL	
			Boy	Girl	11	12	13	14	15	16	7	8
RURAL NEGRO	Alabama	Experimental	11	9	2	3	7	7	1	0	2	18
		Control	2	5	0	2	4	1	0	0	3	4
	Mississippi	Experimental	11	6	0	4	7	4	0	2	12	5
		Control	7	4	0	6	2	1	1	1	9	2
	South Carolina	Experimental	6	4	0	2	3	4	1	0	5	5
		Control	7	3	0	3	6	1	0	0	10	0
	SUB TOTALS		44	31	2	20	29	18	3	3	41	34
URBAN NEGRO	Virginia	Experimental	8	6	0	1	6	7	0	0	6	8
		Control	4	8	0	2	7	3	0	0	6	6
	SUB TOTALS		12	14	0	3	13	10	0	0	12	14
APPALACHIAN	Kentucky	Experimental	5	8	1	1	10	1	0	0	7	6
		Control	13	17	0	5	18	5	0	2	11	19
	North Carolina	Experimental	8	13	0	6	11	4	0	0	13	8
		Control	8	7	0	3	5	7	0	0	5	10
	Tennessee	Experimental	12	5	0	5	8	4	0	0	11	6
		Control	10	3	0	2	10	1	0	0	2	11
	SUB TOTALS		56	53	5	22	62	22	0	2	47	60
REGIONAL TOTALS			112	98	5	45	104	50	3	5	102	108

Plans for Work and School" was designed for the children along with one for the mothers, "Mother's Survey of Job Knowledge and Occupational and Educational Goals for Children." (See Appendixes A & B).

Children's Survey Form

Prior to administration of the before-test to children, consent of the school superintendent, the school principal, and classroom teachers for group administration of the instrument during school hours was obtained. School personnel were advised that interviewers would be contacting families with an explanation that the activity was the continuation of the project in which they had previously cooperated.

To equalize any influence of the mother's interview upon the child's or vice versa, the administration of the children's questionnaire occurred at a point approximately half-way in the three-week period allowed for surveying the mothers prior to the beginning of the first group session. One state varied this procedure. In South Carolina children's before-tests were administered prior to interviewing mothers so that contacts could be reestablished and current addresses verified. Because of schools closing for the summer, after-tests were administered individually to each child in his home at the same time his mother was taking it. Also in this state, three of the experimental mothers and seven of the control mothers were administered after-tests by different interviewers than the ones who administered the before-tests.

The children's before and after-tests were administered by university staff, many times by those who were members of the technical committee, and graduate assistants or project researchers. Locations in the schools such as cafeterias, libraries and gymnatoriums were used for testing when whole classes were not tested in the classroom. Students were willing to go to the various locations, and since they remembered the research personnel and remembered responding to the baseline questionnaire, the process was well received in most states. Only one state (Mississippi) reported difficulty because school had suddenly been dismissed for the year, a week earlier than scheduled. Students were not as eager to participate when their classmates were socializing.

Absences among students on the chosen test day were not a problem. When absences did occur, the principal or a teacher asked students to complete the questionnaires on another day. Then they were mailed to the research personnel.

Two states somewhat altered the procedure. In Virginia the post survey was conducted at a centrally located YWCA during an evening about one month after the public school had closed. Children who did not appear at the YWCA later completed the questionnaires (administered by research assistants) at their home (of the 47 subjects invited, 19 attended the testing session -- 10 experimental and 9 control children).

A delay in the beginning of the group meetings in Alabama prevented group administration of the children's after-tests because of the closing of the schools for summer vacation. Therefore, interviewers took questionnaires to the children's homes and requested that each child complete the instrument, working independently, at the same time the verbal interview with the mother was being conducted.

Mothers' Survey Form

The mothers' *before*-tests were administered in the individual homes at conveniently arranged times during a three-week period prior to the first group session. Interviewers, hired from the community, or research personnel contacted the experimental and control mothers, reestablishing their association with the baseline survey. In some cases appointments were made by telephone. When telephones were not available, the interviewer visited initially and secured the interview if possible; otherwise, a second visit was made.

Each interviewer was given maps of the community showing the location of respondents' homes by identification code, and questionnaires for each case with the name of the family and the survey child.

Plans for the three group meetings for mothers were introduced by the interviewer after questionnaire completion. Flyers promoting the meetings -- indicating location, time of meeting, group leader and meeting topic -- were left with each mother. The interviewer explained the payment which was to be given to each mother as compensation for participation and the transportation and child care services to be provided if needed. The mothers were asked to return a commitment card indicating their willingness to attend the meetings.

The *after*-interviews with experimental mothers began three weeks after the third and last group meeting. Out of the original experimental sample contacted, only the mothers who attended two or three group meetings were interviewed. The interview period for mothers in the control group began at the same time. Again, as in the pretesting period, mothers in both groups were interviewed individually in their homes by the same interviewers who had contacted them initially.

Interviewers

Selection of Interviewers

Local interviewers were selected on the recommendation of school officials (local and county) and Extension personnel after personal conferences. In some situations members of the university research team administered the survey instruments.

Although patterns of selection varied among the states, generally people familiar with the communities and the school settings were selected to make the initial contacts with the mothers and administer the interview schedules. One to four interviewers were used in each state. Educational qualifications and other characteristics of interviewers varied from subculture to subculture as well as within subcultures and even individual schools.

Training of Interviewers

Most of the interviewers, having been trained by the university staff, had conducted interviews during the baseline study two years prior to the experimental phase so that they were familiar with the project goals. However, additional training sessions were held to review the initial procedures and acquaint them with the purposes of the experimental phase and procedures for administering the *before* and *after*-tests.

A manual for interviewers was developed by the regional technical committee. This included sections on understanding the project goals, responsibilities as an employee, interviewing techniques (based in part on "Training Guide for the June 1954 Enumerative Research Survey." USDA Marketing Service, Special Statistics Branch, May 1954), preparing questionnaires, locating sample homes and contacting participants, introducing the questionnaire, asking questions, recording the answers, checking schedules, informing mothers about the group meetings, and terminating the interview.

Group Meetings for Mothers

Program Outlines

The complete program outlines developed to achieve the objectives mentioned previously are included in *Information Series II* (IS, II). A summary of each is presented below.

Program I. (IS, II, pages 13-73) "The World of Work" was designed to help the mothers understand the variety of jobs available and the education and training needed for each and to help them understand that changes in their children's goals were to be expected. The career ladders developed by the technical committee and job posters showing training needed were presented. The Widening Occupational Roles Kit (Science Research Associates) was also used. The mothers took home sections and read about jobs and training. (The kit describes 490 different jobs.) Group interaction was stimulated by the making of "stained glass" bottles during Program I. This activity helped the mothers understand changes in children and how mothers can influence these changes. Research by Gist and Bennett (1963) has demonstrated a maternal influence upon occupational aspirations, particularly among Negroes.

Program II. (IS, II, pages 77-107) "Roads to Opportunity" urged mothers to talk about their children, tried to create an optimistic outlook that there are jobs available, and discussed ways mothers can help their children have the kind of job opportunities to which they aspire. Caplan, Ruble and Segal (1963) state that pupils need to learn to understand themselves and the world at large before the question of vocational choice becomes realistic. Speakers were chosen from the community, one professional person and one with vocational training, to tell what motivated them in early life, their feelings about their environment, significant persons in their lives and what they did to make sure they achieved their goals. The speakers were also asked, "What things can young people in this community do to help themselves?" "How can mothers help their children?" A discussion period followed with charts to help the mothers understand the need to plan early, how their children are unique, and the need for parental support, self-confidence and independence.

Program III. (IS, II, pages 127-155) "A Job for My Child" helped parents obtain a better appreciation of the value of education and helped them see how this value could be transmitted to their children. A study by Sperry and Kivett

(1964) provided evidence that boys appear unaware of the educational requirements necessary for certain types of jobs, particularly those of a professional nature. Speakers from industry and the vocational school in the area talked about jobs and training available in the community and answered specific questions from the mothers. Posters and charts from Program I and Program II were displayed for reference if needed. A flower making activity was scheduled to help the mothers understand that they and other people can be sources of influence in a child's life, his coming of age and attaining maturity. The pulling apart of the petals represented the world of work opening up to the children.

Group Leaders

Selection of Group Leaders In states in which the research personnel did not conduct the group meetings, various agencies were consulted for suggestions in securing the group leaders. Groups consulted were school principals, county school superintendents, teachers, and county home economics and extension personnel. Table 18 presents descriptions of group leaders by state, subculture, race, sex, and background characteristics.

Specific criteria were not established and followed in choosing the group leaders. However, factors such as skill in promoting group discussion, and ability to demonstrate warmth and to generate trust and acceptance were considered more important than sex, age, or racial characteristics. Each state secured the person(s) who seemed best qualified to perform the assigned duties.

Preparation of Group Leaders. A full account of the project history was reviewed with those leaders who had not been previously associated with the project. This review was done not only to help the leader understand the purpose of the meetings, but also to help in answering questions mothers might ask about the project. Each leader was provided with a copy of "Program Procedures Manual for Group Leaders" (Summary in Appendix K; complete manual in Information Series II, pages 3-13) and a copy of each lesson plan with accompanying illustrative and demonstration materials. Unless the group leader was a member of the research staff, the lesson plans were reviewed in detail, with appropriate explanations and suggestions supplied. Names and addresses of all subjects in the experimental group and names of other persons scheduled to participate such as speakers or panel members along with a brief biographical history of each resource person were provided.

Group leaders in two of the states had worked with the pretest sessions and were helpful in securing other program participants because they were familiar with the requirements. In many instances the success of the programs was in part attributable to the skillful manner of group leaders in making the group members feel at ease. All the leaders had had experience in group leadership situations and many had extensive records of teaching experience.

Assistant Group Leaders. In all seven states someone served as assistant to the leader. This person arrived early to assist in preparation, distributed and collected name tags, assisted the women in performing the special interest activities, displayed illustrative materials at the appropriate time, prepared (or supervised the preparation of) and served refreshments, and recorded information about group interaction. Background information, sex, and race of assistant leaders are summarized in Table 18.

TABLE 18

Description of Group Leaders and Assistant Group Leaders

	State and Subculture	Group Leader		Assistant Gr. Leader		Background and/or Present Position		State Used Observer(s)
		Sex	Race	Sex	Race	Group Leaders	Assistant Group Leaders	
RURAL NEGRO	Alabama	F	W	F	Bl.	Graduate assistant in CDFR, Auburn Univ. on S-63 project; former Extension Agent; Graduate minor in guidance & counseling	High school counselor - active in civil rights - poverty background	—
	Mississippi	F	W	F F	W W	Masters in guidance education; experience in teaching occupational-educational information as graduate extension course; experience working with black youth	Two interviewers assisted with first meeting and one for the other two meetings. Provided transportation for the mothers	yes
	South Carolina	F M F	W W W	same		Project Director - 20 years teaching exp. Univ. personnel-experience with research, social work and teaching Research Assistant-experience with research projects	Project Research Assistant and interviewer--also worked with lessons	yes
URBAN NEGRO	Virginia	F	Bl.	F	Bl.	Mother of five children; teacher's aide, Girl Scout leader, community leader, teaching night classes; 10 years of formal education (Selected with help of County Extension Office.)	Graduate student, participated in group leader training session	yes
APPALACHIAN WHITE	Kentucky	F	W	F	W	Home Economics Extension Agent for 20 years (Family Life Specialist); conducted pretest sessions of the lessons.	Home Economics Extension Agent--no pretesting experience with lesson materials, but reviewed set S-63 Committee Members were present	no
	North Carolina	F	W	F	W	High school home economics teacher--much experience in conducting adult classes in the community-graduate courses-conducted pretest sessions lessons.	Experimental group interviewer--elementary school teacher	yes
	Tennessee	M	W	F	W	Member of Technical Committee and Univ. Department Head--many experiences in leadership.	Member of Technical Committee	yes

Selection of Participating Speakers. Suggestions for speakers were sought from school principals, county superintendents, Agricultural Extension personnel, and representatives from other agencies accustomed to working with adult groups. The most important sources were the group leaders, assistant leaders and/or interviewers. Many times, following a disucssion with university personnel, the group leader or others made the initial contact with possible program participants after which a formal letter was written to these people giving them the program outline and background information on the project and asking them to speak. Personal contacts were then made by the research staff. In other situations, the research personnel made initial contacts either by letter or personal visit.

One of the three sessions included a speaker from the field of education and another speaker from business and industry. Thus, educational as well as occupational opportunities from the local area could be presented and discussed. Another session included two speakers who presented autobiographical information relative to their own occupational and educational accomplishments. One of these two speakers was to have had a technical level occupation with the other having a professional background. A detailed outline of the speaker's presentations for all lessons and general guidelines for selection appear in Information Series II, pages 101-107, 143-155.

Implementation of Experimental Phase

Community Reception of Interviewers

The interviewers were well received and the mothers were generally cooperative in all states. This cooperation was particularly true in the states in which the interviewers were residents of the communities within which they worked.

Problems Encountered in Interviewing and Administering the Tests

Contacting Mothers. In general interviewing in all states was conducted without major difficulty. However, in the rural Negro subculture, locating the mothers was a problem. Interviewers sometimes spent hours trying to locate a single individual. In some cases neighbors would not admit to knowing the sought individual even though the interviewer identified herself. In some cases the name on the questionnaire was not that commonly used by the subject. Even though children had been asked directions to their homes and cards had been prepared, homes were difficult to locate, because many of the subjects did not even live near roads.

Interviewing Situation. Although mothers were highly cooperative, some testing conditions were far from ideal. When ten people were living in three rooms, it was difficult to achieve any kind of privacy with the interviewee. Some difficulty was encountered in the student testing sessions in one rural Negro survey area. The post-tests were conducted the last few days of school, during which time no classes were being held and students were free to roam the halls. Needless to say, some students resented giving up socializing to answer the questionnaire.

Administration and Framework of Group Meetings

Meeting Place, Time, and Room Arrangement. Meeting places were selected prior to onset of the interviewing so that subjects could be given information about the place of the meeting at the time they responded to the before-questionnaire. Each state made the selection considering adequacy of facilities, centrality, and availability of meeting sites. Whenever possible the group leader shared in this decision. The major concern was choosing a place that would be familiar to the women and comfortable to them. Locations for meetings, time, and room arrangements varied from state to state.

Variations in location ranged from meetings in elementary and high school classrooms, cafeterias, and libraries to a YMCA Coffee House on a university campus and to a YMCA Activity Room. One state conducted meetings on Monday evenings, two states on Tuesdays, one state on Wednesdays, one on Thursdays, and one state (Kentucky) held meetings on Friday mornings.

Plans for room arrangements utilized the existing facilities and equipment. Some tables were vertically arranged with the leader's table and a tape recorder longitudinally placed; others were placed in a semicircle so all participants faced the leader and the charts; one state arranged rectangular tables in a large circular shape with chairs around the outside; and another state had participants sit at desks, but found this arrangement a disadvantage. In order to make the surroundings more pleasant, one state divided a large area with folding screens. One side was used for a refreshment area; and in the adjacent area a different U-shapped arrangement was made with rectangular tables for the discussion sessions each week.

Preparation for Meetings

Meeting rooms were prepared ahead of time by research staff members, group leaders and assistants, interviewers or school personnel. Before each session, tables and/or chairs were arranged, illustrative materials were displayed, refreshments and places to serve them were prepared. Tape recorders were placed and SRA materials were arranged for viewing and checkout. Whenever possible, rooms were selected which would accomodate 25 people seated in such a fashion that each faced all the others. The comfort of the women was always considered. If possible, rooms were well-lighted and ventilated with sources of distraction removed.

The leader(s) and assistant(s) arrived an hour before the appointed time (if they had not been responsible for setting up the room) to prepare the locations and be ready to greet the women, many of whom arrived as much as forty-five minutes early. School custodians assisted in arranging rooms and restoring furniture for regular school classes.

Name tags were prepared ahead of time for each mother who was expected to attend and these were conveniently placed in the meeting room or handed to each as she arrived. One state also placed a large card bearing the participant's name on the table in front of her. Name tags were collected at the end of the first two meetings. For the Mississippi group meetings the suggestion to use the first names of the women was not followed because it was felt that the group members would have been offended to have been so addressed by a younger white woman. Any decision regarding names to use should consider the appropriateness in terms of the group's values.

In each state a variety of simple refreshments was selected according to the known food and beverage preferences of people in the particular area and subculture. Two states printed recipes for foods served, thus adding another "take home" value for each mother. Refreshments were served in areas away from the place of the group meeting. This arrangement permitted participants to enjoy more physical movement after an hour of immobility. This also permitted an assistant to make necessary last-minute preparations for the break without disturbing the group. In order not to direct attention away from discussion activities, the leader was not expected to serve refreshments. Break times were limited to fifteen minutes. Women were usually quite willing to resume the group structure. The mothers enjoyed the social opportunity but were sincerely interested in acquiring something helpful to their children.

Publicity and Recruitment

Publicity was used repeatedly as an inducement for creating interest in group session participation. Notices were worded so that they attracted the attention of the mothers and provided information about the educational and informal aspects of the program. (Copies of letters and publicity flyers described in this section are included in the Appendix of Information Series II.)

Mothers in the experimental group were given personal invitations to attend group meetings by the interviewers at the time of administration of the before-test. A printed flyer was given each subject describing the date, time, place, leader's name, and nature of the first group meeting and stating that refreshments would be served. A letter was enclosed specifying the amount and conditions of payment for attendance, in the states offering a payment. In some states a letter was enclosed from the researchers or group leaders indicating how glad they would be to meet the women and have them attend the sessions. Second and third letters referred to the first and second sessions.

Each subject received a pre-addressed postal card to be signed and returned as a formal commitment to participate. The interviewers served as "recruiting agents" in explaining the programs to the women and in encouraging them to mail their "return cards" and attend the sessions.

On the day preceding each meeting most of the mothers received a flyer and/or letter reminding them to attend. (Two states provided no additional publicity after the first meeting.) In addition to the letter, on the night before the meeting in one state, the mothers were telephoned by the interview supervisor and personally invited to attend the meeting. Mothers who had been absent were also contacted in most of the states. In one state, two days before the meeting, additional "reminder-type" flyers were sent to the mothers via their children.

Transportation

All states working with rural Negro groups provided transportation for the mothers to attend the group meetings. In one of these states all mothers expressed a need, but none called to make the arrangements. Thus, each interviewer drove by the home of each of her interviewees and brought those who needed rides to the meeting. This involved several hundred miles of driving over gravel and dirt roads, but as it turned out, 12 of the 18 who attended were expecting rides. In another state car pools were arranged for mothers living near each other.

In the urban Negro sample transportation was not needed. Car pools were usually arranged by the mothers in the Appalachian areas.

Payment for Participants

Individual differences in state funds and in local conditions thought to affect the desirability of compensating various participants made uniformity impossible.

Each state followed established guidelines as closely as possible with regard to source and amount of payment. Generally, states were to have allowed experimental subjects $10.00 for attendance at all sessions and participation in the interviews, with absences prorated. Each mother was to have been supplied with a written agreement promising the check for attendance at all sessions (Appendix F). The prorated conditions of payment were to have been fully disclosed prior to the meetings. Control subjects were not to have received payment. Interviewers were to have been paid $5.00 - $6.00 per experimental and control interview with no additional amounts allowed for travel. Group leaders were to have been paid $15.00 per session (total included some planning time) plus travel at ten cents per mile; and other participants were to have served on a volunteer basis.

Guidelines in summary form appear in Table 19 along with a state and subculture report of the various patterns of payment. Other statements pertaining to individual state differences are summarized in the remaining part of this section.

One research unit studying a rural Negro sample was asked by the county Extension agent in the survey area not to pay participants because of possible interference with future "nonpaying" programs. However, after poor attendance at Session I, mothers were sent letters telling them that a small gift would be given to each person attending Sessions II and III. In other states, although the leaders and others initially had doubts about the payment, they later felt it had been significant in insuring attendance.

In most cases the prorating pattern was not followed for those mothers who attended only two sessions. Regularly enrolled women were paid for all three sessions even if they missed one. Usually the absences were caused by illness and the women had made special efforts to tell someone that they could not be present and why they had to be absent.

Provision for Child-Care Services

None of the states made provisions for child-care services, even though a suggested program had been included in the research manual. During interviewing the possibility of having child-care services was presented, but none of

TABLE 19

General Guidelines and State Practices for Payment for Participants

Guidelines	Rural Negro			Urban Negro	Rural White		
	Ala.	Miss.	S.C.	Va.	Ky.	N.C.	Tenn.
Experimental Subjects $10.00/3 sessions	yes	yes	no	yes	yes	yes	yes
Written agreement re: payment		no	no	no	no	yes	no
Prorated absences $6 = 2 meetings; $3 = 1 meeting	no all paid $10	no payment if absent any session	no	yes	no, if had excuse ($10 for 2 sessions--none for 1)	no, if had excuse	no
+ transportation	no	no	no	no	yes, $1-$2 (gas money for drivers)	no	$1 per person to mothers bringing others
Control Subjects payment	no	no	no	no	no	no	$5 for 2 interviews
Interviewers $5-$6 per experimental and control interview completed		$6.00 per	*	*** No, paid $2.50 per hr. + trans.	Grad. Asst. monthly salary plus expenses	$6.00 per	$6.00 per**
Group Leader $15.00 per session + transportation		Transportation only	* *	$3.00 per hr. + trans.	Time donated by Extension Service	yes yes	* *
Meeting Participants voluntary basis	yes	yes	paid $25 per meeting	yes	yes	yes	$25 each (student $10)
Custodian		no	School supplied	no	no	gift	$10 per session

*No compensation if member of research staff

**Interviewers received $3.00 for a contact that required much driving and discussion even if no interview schedule obtained

***Interviewers and group leader paid by the hour because of university policy the mothers requested this service. However, some interesting things happened in several states. In one state, an average of 15 or 20 children came with their mothers each night. They were restricted from the meeting room and allowed to play outside the building or in a large adjoining room. In another state, two children were allowed to stay in the meeting room for flower and bottle-making activities but were asked to leave before the discussion began. In one evaluation a mother commented that child care was not a problem, but that she would have enjoyed bringing her children to the meeting.

Conducting Group Meeting Programs and Accomplishing Objectives

Leaders followed the program outlines prepared by the technical committee as closely as possible (refer to Information Series II). Variations in the states' presentations of sessions and an evaluation of methods and materials used in the programs is presented in the findings section.

Program I - The World of Work

Five objectives were identified with Program I. These were carried out in the group meetings through the learning experiences listed with the objectives as follows:

1. An interview question was used to help the mother identify the unique characteristics of her junior high child's interests and abilities (see Appendix B, Mother's Survey, Question 65).

   To accomplish this objective mothers were asked to answer a survey question on which of the child's characteristics should be accepted and which ones could be changed.

2. Group interaction through creative activity was chosen to encourage group participation and to build an understanding that changes in the child's interests and goals are to be expected and are a natural part of the development process

   A bottle-decorating activity was chosen to encourage group participation. The stained-glass bottles, each one as different as the mothers wished to create them, were used as analogies to understanding differences in children's interests and goals.

3 and 4. Career ladders, job family charts, and SRA kits were used to enlarge the mother's understanding and awareness of the world of work, types of occupations and job opportunities; and to develop the mother's awareness of the relation between school work and the world of work.

   Printed job chart posters (Health Careers, Millwork, Building Trades, Aerospace, Sales, and Secretarial) were presented and discussed according to (a) how one can move from job to job with similar basic training and (b) how a person can "build" on this basic training and "advance on the job ladder." A second poster in each of the six categories listed the variety of jobs and the training required for each one within the job family.

5. Discussion questions were used to explore possible relationships between the child's dominant interests and abilities and types of possible jobs.

   Each mother was given a sheet with four questions to think about during the week, answer, and bring back to the second meeting. Discussion with the child was encouraged.

Program II - Roads to Opportunity

Six objectives identified with Program II were carried out through discussions, use of visuals and presentations of speakers from the community.

1 and 2. Informal dialogue and discussion participation were used to create for the mother an atmosphere of belonging to the group by stimulating a discussion of her child, and to make the transition from the discussion emphasis in the first session to that of the second session by urging mothers to talk about their children.

   Through informal dialogue as the women arrived, the leader, assistant leader, and research personnel were able to start the session by stimulating the mothers to talk about their children and exchange SRA materials. Job charts from Session 1 were again displayed.

   The leader making reference to the four questions given out at the end of Session 1 urged the mothers to talk about their children.

3. Vocational and professional speakers talked about their personal lives in an effort to help the mother create an optimistic outlook or attitude that there are job opportunities for her child(ren).

   Two significant people from the community representing vocational and professional areas told their personal success stories relating quality of life experienced as a child, feelings about their environment, the person(s) who motivated them to be successful, and what they did to make sure they achieved these goals. The presentations provided an example of achievement with which the mothers could identify because the speakers related well to the group. In many cases the speakers were known to some of the group members.

4. Picture charts and summary discussion were used to present ways in which mothers can help their child(ren) have the kind of job opportunities to which they aspire, to present characteristics of children valuable in the preparation and attainment of successful job opportunities, and to list and discuss specific things mothers can do to foster the development of the desired characteristics in their child(ren).

Eight charts depicting roads to opportunity, early career planning, early success in experiencing achievement, the uniqueness of each individual, parental communication and support, determination, self-confidence, and independence were presented. These were viewed throughout the discussion of ways in which mothers can help their child(ren) have the kind of job opportunities to which they aspire and during the discussion of characteristics of children valuable in the preparation and attainment of successful job opportunities.

Program III - A Job For My Child

Five objectives identified with Program III were accomplished through discussion, use of visuals and a panel-type presentation with speakers from industry, a vocational/mechanical school or community college, and a student who was in high school or community college (or a recent graduate) and who was employed. (Refer to the section on "Selection of Participating Speakers" for a detailed discussion of the participants' qualifications.)

1. Group interaction through creative activity was chosen to provide continuity from Programs I to III that children grow and develop into adults -- what the child is, the man will become.

   Materials for making paper flowers were provided and each mother prepared these as the leader discussed the growth of children toward an occupational goal. The flower represented the individuality of each child. Pulling apart layers of tissue paper represented the world of work "opening up" to children. This activity also provided another opportunity for the mothers to feel comfortable with guest speakers who had not been present at the first two group meetings.

2. A representative from industry spoke to the group in order to provide information on availability of jobs at various levels of skill and to illustrate openings in the job market -- locally and regionally.

   Even though representatives from industry varied in background in each of the seven states, they talked about different job opportunities in the specific areas, how students can apply and qualify for jobs along with some of the qualities needed to be successfully employed.

3. A representative from education spoke to the group in order to provide information on educational channels to job preparation and job attainment.

   Representatives from vocational and technical schools, community colleges, or high school counselors talked about scholarships available, job opportunities for college and non-college graduates, high school work programs available to students, and economic ways to "survive" while in college.

In addition to their verbal descriptions many educational representatives provided booklets of educational offerings available to specific areas.

4. A panel discussion method was used to relate ideas discussed by the previous speakers to the mothers' specific situations. During the panel session mothers were given the opportunity to listen to and question the industrial and educational speakers and a student who was in high school or a community college (or a recent graduate) and who was working. The students provided information about the ways they had handled specific educational and vocational problems.

5. An illustrated talk was presented by the group leader in order to summarize the key points of all three group meeting programs in order to review and give the mothers an opportunity to see all the ideas in relation to the total vocational process. All visuals from the preceding programs were displayed and key points of each were reviewed.

Follow-up Contacts

After all data were obtained, letters of appreciation were written to all individuals who participated in the program or were involved in some way. These were group and assistant leaders, interviewers, mothers and children in experimental and control groups, school superintendents and principals, classroom teachers, speakers for Group Meetings 11 and 111, and others who provided identifiable services.

Observers' Records of Interaction

An observer kept records of group activity during each of the three group meetings in four of the states. The checksheet was devised so that it permitted the observer to record a frequency count of kinds of participation by various subjects. The forms were prepared in advance with the names of all participants inserted. If the observer did not know the group participants, seats were assigned or name cards were displayed on the table in front of the participants so that the observer could easily identify each one.

As an individual spoke, the observer marked in the appropriate column by the name or number of the speaker. Then, on a separate sheet of paper, a narrative entry was made indicating the substance of the contribution

A sample of the page used for recording participation follows in Table 20 Some of the narrative entries are shown below the chart.

TABLE 20

Record of Meeting Participation

Group Member and Numbers	A Answered question by leader or others	B Contributed Information	C Shared personal experience	D Asked question	E Expressed interest or concern
Participant* (10)		5	1		
Participant (23)	2	1	1	2	
Participant (13)	1			1	
Participant (9)	1				

Narrative entries:

13D - "How much longer does it take to make a surgeon than a doctor?"

13A - "I talked with my child this week about...."

9A - "I talked with my daughter, but I can't speak it." (Daughter wanted to be a psychiatrist and mother could not pronounce it.)

*Names were used during the sessions, but omitted for reporting purposes.

Evaluations of Group Meetings

Mothers' Evaluation Sheets. At the end of the third session the women were told that the research directors wanted them to report what they liked best and which materials and parts of the meetings were most helpful. During the post-interviews three weeks after the last group meetings, the interviewers asked questions to ascertain the mothers' ideas about the success of the programs. A copy of the program evaluation appears in Appendix L.

Reference

Caplan, S.; Ruble, R. and Segal, D. A theory of education and vocational choice in junior high school. Personnel and Guidance Journal, 1963, 42, 1929-135.

CHAPTER X

FINDINGS FOR THE EXPERIMENTAL PHASE

The findings of the experimental phase of the study will be reported in three sections. The first section includes an analysis of the changes in responses measuring educational and occupational information gained, and a report of the children's academic motivation and levels of occupational and educational aspirations and expectations as well as those of their mothers for them. The second section considers the intervention program for mothers. The scores and other statistics found to be significantly related to intervention are reported for each objective of the experimental phase -- identification of children's unique interests and abilities, understanding changes in children's interests as a developmental process, awareness of the world of work and its relationship between school and work, understanding the relationship between interests and abilities and occupations, and guiding children's career planning. The last section presents an evaluation of program effectiveness.

Changes in Responses Measuring Information, Aspirations and Attitudes

The first objective was to compare responses of experimental and control youth and their mothers on before and after tests of information, aspirations and attitudes related to educational and vocational consideration for the youth.

Information on Educational and Occupational Facts

Information about jobs and education was presented in all three of the programs for the mothers (see Information Series II, Southern Regional Committee for Family Life, 1973). The Industrial representative was to provide information on availability of jobs at various levels of skill; and to illustrate openings in the job market both locally and regionally. Observers in all states noted that industrial representatives were frequently asked specific questions primarily concerned with programs and jobs for older children.

The educational representative was to present educational channels to job preparation and job attainment. In some of the states booklets of educational offerings available in specific areas including their verbal descriptions were presented. It was felt that these were very helpful and that more information in hand-out form would have been well received. One representative discussed specific ways in which parents can participate in the school vocational program to motivate older children. Observers concluded that many local people can be resource persons on programs related to educational and occupational planning.

Assessment of Information and Gain

Information gained about jobs and education was tested by the number of correct answers to 26 items in the questionnaires administered to the mothers and

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youth (see Appendix A for "Survey of Student Plans for Work and School," items 69-80; and Appendix B "Mother's Survey of Job Knowledge and Occupational and Educational Goals for Children", items 53-64). The questionnaires were administered before and after the experimental mothers had attended three group meetings. The same items were presented to a control group of mothers who had not received treatment These items made up the variables entitled Mother's Information (acronym MINFD), and Child's Information (CINFD) (See Appendix C, Summary Information on variables). The difference between the before score and the after score was computed for the selected experimental children and their and control mothers.

The gross scores for the experimental and control subjects on the before and after tests showing also the percentage correct of the total possible scores are presented in Table 21. The total group of experimental mother-child pairs had a mean increase in gross scores of 4.6 percent on the after tests while the control mother-child pairs had an average increase of 1.6 percent.

Further attention was directed to the scores by sub-culture and the percentage of gain between the before and after tests for control and experimental mothers and children. This examination revealed that the rural black experimental mothers showed the largest gain (12 percent) of any of the mothers on the after test; whereas, the urban black experimental mothers reflected a loss of 0.6 percent. The analysis was handicapped by the small number of urban black subjects. The scores by sub-culture were not significantly different; but the trends indicated are that the experimental groups gained more than the control groups, and that the rural groups gained more than the urban.

Examination of the raw data revealed that individual mothers' job information score differences between the before and after tests (MINFD) ranged from -7 to +12 (Appendix C). These data are presented in Table 22. Calculations on these mothers' scores (MINFD) revealed that significantly more (P_0=.01) attained increases than decreases on the after tests in both the experimental and control groups. (Increase was defined as more answers correct on the after test than the before test; decrease was defined as more incorrect answers on the after-test than on the before test.)

However, there was no significant difference between the experimental and control groups. When the student's t-tests were computed separately for boys and girls, a slight significant difference (P_0 =.06) between the before and after tests was found for mothers of boys.

A similar procedure was used to examine changes in job information scores (CINFD) among the children on the before and after tests. Differences between the children's scores ranged from -8 to +12. Frequencies for each score according to sex of the child and experimental or control groups are presented in Table 23. Computation of a chi-square test did not reveal a significant difference between experimental and control groups when boys and girls were combined. However, when urban black girls and boys were computed separately, significantly more girls (P_0=.02) in the experimental than in the control group attained higher job information scores on the after test.

The measuring instruments, the 26 questions constructed and related to job information (see Appendixes A and B), were not refined measures but could

TABLE 21

Mothers' and Children's Scores on Job Information Items Before and After Experiment for Experimental and Control Groups with Number and Percentages of Increases or Decreases of Scores by Sub-Culture

Subculture	Mother-Child Pairs N Exp.	Mother-Child Pairs N Cont.	Maximum Possible Score* E	Maximum Possible Score* C	Experimental Before Test	Experimental %+	Experimental After Test	Experimental %+	Control Before Test	Control %+	Control After Test	Control %+	Percent of Increase or Decrease E Group	Percent of Increase or Decrease C Group
Rural White														
Mothers	51	58	1326	1508	1090	82.2	1108	83.6	1226	81.3	1250	82.9	+1.4	+1.6
Children			1326	1508	981	74.0	1003	75.6	1101	73.0	1109	73.5	+1.6	+0.5
Rural Negro														
Mothers	47	28	1222	728	797	65.2	943	77.2	510	70.1	553	76.0	+12.0	+5.9
Children			1222	728	756	61.9	818	66.9	513	70.3	503	69.1	+ 5.0	-1.4
Urban Negro														
Mothers	14	12	364	312	297	81.5	295	81.0	252	80.8	259	83.0	-0.6	+2.2
Children			364	312	245	67.3	267	73.4	213	68.3	225	72.4	+6.1	+4.1
TOTAL	112	98	5824 **	5096 **	4166	71.5	4434	76.1	3815	74.9	3900	76.5	+4.6	+1.6

* Highest Possible Score = N (number of subjects) X 26 (number of questions)

** Highest Possible Score for mothers and children combined

+ Percent of correct responses out of maximum possible score

TABLE 29

Differences Between Before and After Tests by Frequencies of MINFD* scores for Control and Experimental Groups of Mothers of Boys and Girls

DIFFERENCES	FREQUENCIES			
	Boys		Girls	
	C	E	C	E
-7	0	0	0	2
-6	0	1	0	0
-5	0	1	1	0
-4	0	1	0	0
-3	3	5	3	4
-2	4	4	5	6
-1	5	5	7	3
0	11	9	8	10
1	6	9	12	1
2	8	3	4	6
3	6	4	4	7
4	3	3	2	5
5	0	8	3	0
6	0	3	1	3
7	1	2	1	1
8	0	1	0	1
9	0	2	0	0
10	0	1	0	0
11	0	0	0	0
12	0	1	0	0
Total	47	63	51	49

be assumed to assess information about jobs which was a part of the objectives of the programs for the experimental mothers. It might be noted that the short time lapse (three to four weeks) between completion of mothers' programs and administration of the after test may not have permitted an adequate length of time for the mothers to share information gained with their children; therefore handicapping the provision of an adequate measure of the impact of the planned programs. On the other hand the time may have been too long to expect retention of specific information transmitted from the programs.

TABLE 23

Differences Between Before and After Tests by Frequencies of CINFD Scores for Control and Experimental Groups of Boys and Girls

DIFFERENCES	FREQUENCIES			
	Boys		Girls	
	C	E	C	E
-8	1	0	0	0
-7	0	1	0	1
-6	0	1	2	0
-5	3	2	1	1
-4	1	5	0	2
-3	2	2	6	1
-2	2	5	7	3
-1	11	9	7	3
0	4	11	7	6
1	8	7	7	5
2	5	4	3	7
3	4	6	6	7
4	4	4	2	3
5	1	3	2	2
6	0	1	1	2
7	0	0	0	1
8	0	1	0	2
9	1	0	0	0
10	0	0	0	0
11	0	0	0	1
12	0	1	0	0
Total	47	63	51	49

Aspirations for Education and Occupations

The variables of aspirations and expectations for education and occupation and academic motivation were included under the acronyms of DDD, DUNCD, MDD and ACD (see Appendix C, -- "Summary Information on Experimental Phase Variables" for identification of items on questionnaires.) The measures were analyzed by the means of the gap between the scores on the before and after tests.

ACD - Child's academic motivation score on the *after* test minus the *before* test score.

DDD - Child's aspired minus expected occupational attainment score on the *after* test minus the *before*

DUNCD - Child's aspired plus expected occupational attainment score on the *after* test minus the *before* test

MDDD - Mother's aspired minus expected occupational attainment *after* test score for the child minus the *before* test score

Child's Level of Occupational Aspiration. The DDD mean for the experimental youth was -0.82 while for the control group the mean was 0.32 which may be considered an indication that the experiment decreased the gap between aspirations and expectations. If this decrease in gap be taken as evidence of realism, then the experiment can be said to have promoted realistic thinking. The difference is not, however, statistically significant.

There was no overall experimental effect on the level of anticipated job prestige. This appears to have occurred because a positive effect for the boys balance against a negative effect for the girls. Experimental boys showed an excess of 4.7 DUNCD score units (NORC points) above the control boys, whereas the experimental girls showed a 3.0 deficit below the control girls. This could mean that the experiment tended to inspire the boys and "cool out" the girls.

The fact that the median educational aspirational level of the subjects in this study was in the "finish college" category (See Methodology Section) and that the black aspirations were higher than those of the white's is in line with other findings and contrasts with the relatively low level of occupational aspiration.

Mothers' Level of Occupational Aspiration for Child. When the difference between the *before* and *after* scores on the mothers' aspired minus expected gap in level of occupation (MDDD) for their children was computed, there was no significant difference between the experimental mothers and the control mothers. However, in further regression analysis of the mean values for experimental and control groups with adjustments for characteristics that might be associated with MDDD, significant differences in experimental effect were found between the subcultures at the .05 level ($P_0 = .03$). Whereas the experimental effect was absent for rural whites, it was positive for urban Negroes and negative for rural Negroes (see Table 24). There is no ready explanation of these differences except that a decrease in gap between mothers' occupational aspirations and her expectations may be a logically expected developmental change and the experiment may have slowed down (depressed) this expected narrowing of the gap for urban black mothers, but not for rural black mothers, by exposing the urban black mothers to more acquaintance with the world of work and thus offering some hope for their children's occupational achievement.

Academic Motivation

The ACD means showed the change between the child's *after* and *before* scores on academic motivation. The mean change for the experimental group was -0.35 while the control group's mean change was 0.07. This difference between experimental and control means was not significant. Frequencies of children showing positive and negative changes in academic motivation were tabulated. These data are presented in Table 25. No significant relationship was found between positive and negative scores and sex of child or between the experimental and control groups.

TABLE 24

Means by Subculture and Experiment for
Mothers' Aspired Minus Expected Occupation Scores for the Children
On the After Test Minus the Before Test

GROUP	MEANS						
	N	Urban Negro	N	Rural Negro	N	Rural White	Total Group
CONTROL N=98	12	-4.083	28	-0.357	58	-2.052	-1.8163
EXPERIMENTAL N=112	14	-1.429	47	-2.489	51	-1.922	-2.0982
Experimental Effect		2.654		-2.132		0.130	
TOTALS	26		75		109		

Intervention Program for Mothers

The second objective was to design programs for the mothers of junior high youths on educational and occupational information that would achieve specific objectives concerned with the mothers' identifying unique characteristics of their children, understanding developmental changes in a children's interests and goals, enlarging awareness of the world of work and job opportunities and understanding the relationship between interests and jobs and stimulating interest in guiding the child in career planning.

This objective was deemed important in light of previous studies which have recognized that the family is one of the major socialization agencies contributing to the transference of mobility orientations in the child (See Review of Literature). In fact several investigators assert that parental aspiration is a more important determinant of children's educational aspirations than is social class membership per se (See Review of Literature); Hence the justification for the intervention program designed for mothers.

TABLE 25

Chi Square Table for Academic Motivation (ACD) of Girls and Boys by Experimental and Control Groups

ACD Scores	Boys*		Girls	
	C	E	C	E
-11	1	0	0	0
-10	0	3	0	0
- 9	1	0	0	0
- 7	1	0	0	0
- 6	0	0	0	1
- 5	1	3	1	1
- 4	3	2	3	2
- 3	3	3	1	0
- 2	5	3	2	4
- 1	2	15	10	10
0	8	18	15	17
1	6	6	10	2
2	6	6	3	3
3	2	2	5	7
4	2	0	0	0
5	1	0	0	1
6	1	2	1	1
7	0	1	0	0
8	1	0	0	0
14	[illegible]	0	0	0
Total	47	63	51	49

* Boys ACD experimental and control Chi-square significant at .0835 ($p < .10$)

Girls ACD experimental and control Chi-square not significant (.5655)

Identification of Child's Unique Interests and Abilities

The intervention program planned for mothers was justified by the findings of the baseline study that supported Coppersmith's summation of the influence of parental behavioral orientations on the child's self-esteem (See Chapter VI, Paper 3). Parental warmth and high expectations were found to enhance positive self-regard while parental rejection, domination and severe punishment depressed self-regard. In order to improve the child's self concept it is important to help a mother understand her child's uniqueness.

A survey question (see Appendix B, Mothers Before Test, Item 63) required mothers to select characteristics which described their children's abilities and interests. Mothers responded to the interviewers' questions. Lack of adequate measures and/or the time lapse after the experiment made it impossible to evaluate this objective effectively. Further study is needed of intervention programs and their impact upon self-concept.

Eight charts depicting "roads" to opportunity -- early career planning, early success in experiencing achievement, the uniqueness of each individual, parental communication and support, determination, self-confidence, and independence -- were viewed by the women as things mothers can do to foster the development of the desired characteristics in their children. These were presented as the leader talked about ways in which mothers can help their children have the kind of job opportunities to which they aspire and during the discussion of characteristics of children valuable in the preparation and attainment of successful job opportunities. The reports of the discussion and contributions made by the mothers indicated that the groups understood the points to be learned. With one rural Negro sample, this was accomplished by modification of the suggested program dialogue to suit the educational level of the group.

Understanding of Changes in a Child's Interests as Developmental Process

A bottle-decoration activity was chosen to encourage group participation and to illustrate the child's developmental process. The activity was well-received and the parallel to differences in children seemed to have been grasped. This experience served as a group mixer as well as to point out to the mothers that children are different. It was an excellent "vehicle" for beginning the discussion of variations in children. The bottle-decoration activity interested the women to such a degree that in one group some mothers declined the request to terminate the activity and continued to work on them as the meeting progressed.

To provide continuity in the ideas from each of the programs that growing into adulthood and growing in interests and abilities related to educational and vocational choice, paper flowers were made as the leader discussed the growth of children toward an occupational goal. The flower represented the individuality of each child. Pulling apart layers of tissue paper represented the "opening up" of the world of work to each child. The activity provided an excellent opportunity for the mothers to feel comfortable with guest speakers who had not been present at the first two group meetings. One state reported that although the women enjoyed the activity, the leaders thought the symbolism was not effective for the group members.

Awareness of World of Work and Relation Between School and Work

Generally, mothers enthusiastically received the visual materials; however, an observer in one state (an Appalachian rural sample) thought the charts did not go over as well as the spoken word. Several states reported "lively discussions" of career ladders. One state modified the charts to suit the reading level of the group. Most group leaders reported that presentation of posters required more time than was scheduled, thus, in some groups only major categories could be discussed in the last three job groups. Even though these sessions had been pretested for timing, in the actual sessions extended discussions prevented detailed coverage of each job group.

One leader (an Appalachian rural sample) did not seem to accept the visual materials and the observer felt that charts should have featured more service and social service work in addition to familiar local jobs. Including the aerospace industries seemed a poor choice to this leader since unemployment was high in that area at the time group sessions were presented.

The Science Research Associates "Widening Occupational Roles" kit was used by groups in three of the seven states. Another state had the kit available in the meeting room, but the leader did not use or make reference to it until the project researcher referred to it as a source for answering one mother's question. In this same state only two mothers borrowed materials from the kit. This can probably be attributed to the fact that the leader did not emphasize it. Other states reported success with SRA materials. Mothers chose material that was of interest to them and their children. In one state at least half the women checked out SRA materials, returning them the second week and exchanging them for different job descriptions. Some children had requested that their mothers select specific folders to bring home for them. Several women suggested that they exchange materials during the week for [illegible] their school children. In another state kits were left in the school counselor's office during the week for use by all students.

Relationship Between Interests and Abilities and Occupations

By making reference to the list of four questions given out at the end of Session 1, the leader urged the mothers to talk about their child. Most participants made some comments, but only a few in each state returned the pages. If they brought them, they did not show that they had done so either by referring to them during the discussions or by giving them to the group leader. Several did talk about their children individually to the leaders, the researchers, or to other mothers. The leaders and researchers felt that most of the women would have benefited from individual conferences about their child(ren).

Guiding Children in Career Planning

The mothers were asked whether they ever talked with their children about the kinds of jobs they might have when grown and with what frequency they talked (a lot, a little, none). The comparison between the means on items relating to mothers talking with children about jobs from the before and after mothers' test (MBD) revealed that the experimental mothers had a mean increase of .0102. The t test showed that the experimental mothers' increase was significantly more than the control mothers at the .001 level. The detailed data are shown in Tables 26 and 27. This is evidence that the program stimulated the mothers to talk more with their children, at least they reported more talking, about career planning, one of the most crucial evidences of the effects of the experiment.

The research instrument for the children included the question "Have you ever thought about what kind of job you might like when you grow up?" (CBD). The replies were on a three-point continuum: "no," "a little," and "a lot." When the replies were tabulated according to the change in amount of time the child thought about jobs, the mean increase for the experimental group was .1071 while the mean for the control group decreased by [illegible]. The value of the t statistic between the groups showed significance at the [illegible] level. The experiment seemed to stimulate the children to think more about jobs than did children whose mothers did not participate in such programs.

Table 26

Chi-Square Table for Mother Talking with Child about Jobs (MBD) for Experimental and Control Groups by Sex

MBD		Control		Experimental	
		Boys*	Girls**	Boys*	Girls**
Decrease	-2	0	3	0	0
	-1	7	5	3	4
No Change	0	32	32	32	22
Increase	+1	8	11	20	12
	+2	0	0	8	11
Total		47	51	63	49

*Boys E and C Chi-Square significant at .0056
**Girls E and C Chi-Square significant at .0032

Table 27

Chi-Square Table for Mother Talking with Child about Jobs (MBD) by Experimental and Control Groups

Change in MBD	Experimental	Control
- Decrease	7	15
0 No change	54	64
+ Increase	51	19
Total	112	98

An examination of the differences between experimental and control boys and girls in terms of the amount of thought given to jobs (JBD) was made using chi-square. A chi-square value significant at the .05 level showed that the experimental girls thought more about jobs than did the control girls (see Table 28). On the other hand, there was no significant difference between the experimental and control boys.

Table 28

Chi-Square Table for Child's Job Thought (JBD) for Experimental and Control Groups by Sex

JBD		Control		Experimental	
		Boys*	Girls**	Boys*	Girls**
Decrease	-2	3	1	2	0
	-1	8	9	8	1
No Change	0	30	33	40	38
Increase	+1	6	8	11	10
	+2	0	0	2	0
Total		47	51	63	49

*Boys E and C Chi-Square significant at .5893
**Girls E and C Chi-Square significant at .0465

Evaluation of Program Effectiveness

The effectiveness of the experimental phase was evaluated by observers' records presented sociogram form, mothers' evaluations of group meetings, the researchers' observations of the group meetings, and the researchers' evaluations of all three program plans. (Descriptions of these procedures appear in the Methods and Procedures section of this report.)

Observers' Reports of Interaction

Summaries of several of the observers' records prepared in sociogram form indicated that generally two to seven women in each group (average size group was 16) provided the largest portion of the individual verbal contributions to the discussions. Others appeared keenly interested and would agree or respond "yes" or "no" when asked a direct question permitting agreement or disagreement. The women taking the lead did not monopolize the time unduly. Occasionally several women asked each other questions or directed conversation to a specific person in the group. The sociograms showed that women talked more as each successive session was held.. Perhaps as they became more familiar with meeting in groups with each other, they relaxed and thus talked more freely. (Example of Interaction Record in Chapter IX).

Evaluation of all Three Program

Even though all states conducted the programs with only minor variations in the suggested format, some areas seem worthy of mention. For example, in one rural Negro sample, the extensive detailed instructions prepared for the conduct of group meetings overwhelmed the group leader because of time limitations. This leader felt that the amount of material could have been covered much more effectively in twice as many meetings.

The fact that less than half of the mothers in another rural Negro sample could read inhibited the presentation of the program materials. With this group it was also necessary to simplify some of the vocabulary in the suggested dialogue of the program plans to suit the educational level of the group. Leaders can cope with illiteracy by not requiring any reading as part of the programs.

In some of the states (rural Negro groups in particular) the leaders also found it difficult to get the mother to focus attention on the seventh and eighth grade child. Several of the mothers had large numbers of children, many of whom were in the 10th, 11th, and 12th grades. Thus, it was difficult for them to think in terms of the vocational future of a 7th grader when they had a 12th grader who needed a job next month and perhaps also has several children floundering on the job market. These experiences pointed out the necessity for teaching low-income parents and children the advantages of long range planning, a concept with which they may not be very familiar.

Mothers in a rural Negro group also discussed some problem areas in their attempt to focus on their young children. Some mothers felt that their biggest problem was job discrimination followed by lack of resources for higher education. Although optimistic about the beneficial role they could play in their children's development, they seemed pessimistic about being able to control the external factors in the larger society affecting job futures.

Evaluation of Group Meetings

During the post interviewing session, the interviewers asked questions to ascertain the mothers' ideas about the success of the group meetings and the program plans. Additionally, the researchers and the group leaders made some general observations.

Mothers' Evaluation Sheets. Interviewers reported that the mothers were very willing to fill out the evaluations, and that they talked a lot about the group meetings. Most of the states reported that the mothers, in responding to the evaluation sheets, tended to be very complimentary and to give the responses they thought the interviewer wanted to hear. All tried to be very cooperative and generally seemed to agree with everything. A copy of the program evaluation appears in Appendix K.

Evaluations were received from all 112 of the mothers whose questionnaire data were analyzed. On the first item on the evaluation form the mothers were asked to evaluate each of the materials and techniques employed in the group meetings as to its helpfulness in their understanding of the ideas presented in the program (responses were "very helpful," "somewhat helpful," and "not very helpful"). These materials and techniques reported herein were ranked according to the frequency with which the mothers reported "most helpful." Of this list of nine items the group leaders were most frequently reported as "very helpful." The next most helpful parts were the speakers who presented information on educational opportunities, schools, scholarships and loans. The third most helpful parts were those speakers who related their personal success stories, and the fourth were the speakers who presented job opportunities. Least often reported helpful to the women were the young people who told their experiences after high school. In a later section of the evaluation when mothers were asked through an open-ended question to list the best part of the meeting, speakers were listed first throughout all the subcultures and leaders and discussions listed second and third respectively. This general information should not be interpreted to contradict the above statements.

One hundred and five mothers reported job charts and career ladders as "very helpful" and only one person did not find these helpful. Although the mothers enjoyed the flower and bottle-decorating activities for social reasons, only 80 reported these activities as being "very helpful" in their understanding of important ideas from the group meetings. Twenty-nine checked "somewhat helpful," while three reported these activities as "not very helpful." Later in the evaluation several mentioned that although they found these activities "least helpful" when compared to other parts of the meetings, they did prove a point.

Two states did not offer copies of pamphlets related to various jobs and career opportunities; however, of the mothers using the kits about 90 percent found the materials to be a "very helpful" source. While the other 10 percent reported them as "somewhat helpful."

The "Widening Occupational Roles" kits were used in only four of the seven states. In three of the four about two-thirds of the women used and reported the materials they checked out from the kits as "Very Helpful." It seems that those women who were willing to check out the materials found them to be very helpful. The kit was not available to participants in the state which had a high percentage of non-readers. In the fourth state in which the kit was not used, the leader did not make reference to the materials nor discuss the availability of the kits for check-out.

The division of time between the program and discussions was evaluated by three questions. Ninety-four of the 112 felt that enough time was allowed for discussion with 12 answering "no" to the question. Fifty-three out of the total 112 would have liked for the speakers and the leaders to have talked more than they did while 41 would not have liked that. Eighteen did not respond. Six states reported responses to the questions, "Would you have liked more time to talk about your children or not?" Fifty-three responded "no" and 48 responded "yes" to the question. It was interesting to note that when these were reviewed by subculture, the rural Negro groups tended to answer "yes" more often (range of 70-83 percent respondents answered "yes"), whereas, the Appalachian white mothers answered "no" more often (range of 54-78 percent responded "no").

The number of meetings (3) planned for the experimental phase were viewed as adequate by 73 mothers. Fifty-four would have been pleased with more than three meetings. Although some of these said that three meetings did not seem enough, it might have been difficult to have maintained the high degree of interest for many more meetings unless the program format had been quite different. Field trips might have been desirable.

When asked the best day of the week for meetings, respondents tended to answer the day on which their particular meetings were held. Night meetings seemed to please all the mothers. In one Appalachian county where very few mothers were working, the meetings were held in the mornings. As expected, a few mothers who worked during the day did not attend.

The best way to let people know about meetings was through letters and announcements mailed to the home or by telephone. Announcements by radio or newspaper were not considered good information channels. Seventeen checked "someone go to your house and tell you about it" and fifteen thought "announcements brought from the school by the child" would be the best way to let them know about meetings.

Schools and centrally located meeting places such as the YMCA or YWCA were reported as the best places to hold meetings. Again, the mothers tended to report the places of the group meeting they attended. This, however, is reassuring, because each state made an effort to choose a location that would be widely accepted by those attending.

Repeatedly mothers suggested that similar meetings be held in the future and they indicated an interest in supporting such programs on a continuing basis. This reinforces the possibility of extended uses of such programs--adapting the materials to PTA study-discussion groups, Extension homemaker clubs, as well as 4-H youth groups.

Most women reported in the evaluation that they would have participated without receiving payment but this is open to question. In one state four respondents said they would have attended without receiving payment if they had known before going to the first one that the meetings would have been as interesting as they were. One state did not offer payment for attendance.

General Observations. There were a number of beneficial outcomes of the three sessions that were intended by the experimental design of the study, but which did not lend themselves readily to statistical analyses. Perhaps most important was the sheer pleasure most of the mothers seemed to receive from participating in the meetings and thinking about topics which they had not previously considered.

For many of the participants, particularly in the rural areas, coming into town or the school was a rare outing, and to be the focus of the attention of people involved in a large study really seemed to be an ego booster. It was probably the first time that anyone had ever expressed an interest in what happened to them and to their children. In addition, for one Negro sample the interviews and the meetings provided the women with what seemed to be a positive experience with white people in the community--a still rare thing in some rural Southern states.

Researchers' Observations and Recommendations. Researchers from the various states reported their observations of the three group meetings and made suggestions to be considered by persons wishing to conduct similar group meetings.

Some suggestions for activities that might be included in the group meeting plans were: to provide classes for both parents early in the first year of a child's high school career to discuss ways to guide children in selecting educational paths, and to provide classes for parents and children to allow guided discussion of educational-occupational goals and problems. It was also suggested that parents and students might benefit from group meetings with representatives of local businesses and employment agencies; and that classes in "methods of counseling" would help parents understand their children's problems. Such activities should emphasize the importance of developing rapport between parents, children and counselors, thus setting the tone for an understanding atmosphere that would foster mutual interchange.

Mothers learned that it was important to encourage children early and realized that some of their older children had not benefited from things that might have been offered. Therefore, they tended to emphasize the importance of working with the current upper level high schoolers rather than with the younger children. A possible program would be to offer continuing help to families throughout the school years. The objectives could include motivating children to stay in school as well as how to help older children stay in school.

Mothers indicated an interest in several areas in addition to those included in the program plans or in extending some of the planned topics with more specifics. These areas are summarized in the event the programs can be expanded: tests required for admission to a community college; specifics relating to training required for various jobs; and "on-the-job" training apprenticeships; projecting for new occupations not currently known in a particular area; and special qualities that companies look for when hiring new employees. Suggestions for extending ideas presented in the program plans included the importance of observing the child to find out his particular interests and how to find meaningful activities to maintain that interest; and ideas about suggesting ways to give children opportunities to make choices.

The use of local people as resource speakers seemed to be valued by group meeting participants. They were pleased that people they knew about in the community would speak about themselves relating how they made decisions and who influenced them.

Much of the literature points out that helping deprived people improve their self-image is important to successful program participation. One state with a rural sample made polaroid pictures of each experimental mother-child pair after an interviewing session. Giving the mothers the pictures seemed to give them quite a boost.

Administering such programs while offering the most help to parents and children could probably be aided by cooperating with school counselors and parent educators. The school counselors could disseminate materials by offering a "check-out" service to children as well as parents. This is one way parents and children can be encouraged to communicate about jobs. It is also suggested that more information be provided in handout form that parents and children could keep.

The researchers recognized the attractiveness of providing some things with tangible "take-home" value for the mothers. The products of the creative activities sessions served as one thing; and in several states copies of recipes for the cookies served were provided if the women wanted them.

During a three-meeting series the attrition rate was a problem for a few states; thus, it seems necessary that group leaders would need to consider make-up sessions if attendance was not regular. Usually the women were sick or there were illnesses in the family preventing them from leaving home. However, they conscientiously reported these reasons to the group leader and indicated strong interest in learning what had been discussed during the session they missed.

The atmosphere of the group meetings was generally excellent. Leaders were accepted in non-defensive ways, were well-respected, and what they said was most often considered as reality based. For some groups the suggested program content seemed too much for the number of meetings; however, this varied according to the situation. Perhaps more individual contributions on the part of the women could have been initiated by the group leaders. Generally, only a few in each group were reported to have contributed most of the interaction.

It is recommended that more useful information relevant to the particular locality be presented rather than dwelling exclusively on generalizations. The mothers seemed to prefer down-to-earth specifics after they had grasped the idea; and they would even ask for these specifics relating their questions to personal situations.

A leader must be aware of the local situation in preparation for presenting the program plans. This will enable him to understand the questions and concerns of the participants such as local deterrents to occupational aspirations, particular types of job discrimination, lack of resources for high education, pessimism about external factors affecting job future, and difficulty in controlling certain factors by the individual.

The results of this study are perhaps limited because of the inefficiency of the measuring devices. Test scores probably tell only a fragment of the story. Some of the most important and most lasting facets of the group meetings cannot be expressed quantitatively with the data from this study. Because of the limitations of the research procedures employed, there may be a gap between testable results found in this study and the probable impact of the personal experiences of mother-child communications.

Evidence from this and earlier studies that parental affection, independence training and high parental expectations facilitate the child's feelings of personal worth and need for achievement supports the need for continuing education for parents to assist them in guiding their children's educational and career planning.

References

Southern Regional Technical Committee for Family Life. Program plans for group meetings--Influences on occupational goals of young people in three southern subcultures.
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Summary and Implications of the Experimental Phase

An experimental group discussion program was designed to influence information, attitudes, and aspirations concerning education and occupation among low-income mothers in three selected subcultures, and indirectly among their children as a result of the mothers' interaction with them. From the rural Negro, Urban Negro, and Appalachian rural white subcultures, 112 mother-child pairs were placed in the experimental group and 98 pairs in the control group.

Data were collected from both students and mothers in a standardized questionnaire -- interview method before and after application of the experimental program. The experimental treatment consisted of three, two-hour, structured group-discussion meetings held in consecutive weeks. The meetings were designed to help the mothers understand the unique interests and abilities of her child, the developmental nature of her child, the variety of work opportunities for her child, the relationship between education and occupation, the relationship between her child's interests and career possibilities, and her own role in motivating her child toward career planning.

Analysis of differences between responses of mothers and students on tests administered before and after the experimental program revealed five important effects attributable to the intervention:

1. As a result of the group meetings, mothers talked more to their children about jobs and career planning. Mothers in the experimental group had a significantly higher mean increase in frequency of conversation with their children about career planning between before and after tests than did mothers in control groups.

2. As an indirect result of their mothers attending the group meetings, children more frequently thought about jobs and career planning. A significant difference was observed between girls in the experimental and control groups in before and after measurements of the amount of time they thought about jobs. Although the difference between experimental and control boys was not significant, the direction of difference was the same as for girls. Overall, control students showed a decline in the amount of thought given to jobs while experimental students registered an increase.

3. As a result of the experimental program, both the mothers and children experienced an increase in job information possessed. Taken as pairs, experimental mothers and children registered a 4.5 percent increase in correct scores assessing job information on the after test as compared to their scores before the experimental program was conducted. The control mother-child pairs registered an increase of a smaller magnitude, 1.6 percent.

   Among the experimental groups in the three subcultures, only rural Negro mothers exhibited a sizeable gain (12 percent) in correct scores on job information. Rural white mothers showed a slight increase and Urban Negro mothers a slight decline.

   The experimental children among the three subcultures exhibited a different pattern from their mothers. Both urban and rural black groups had increases of 5 percent or more, and white children had a smaller increase of under 2 percent.

With only one exception, both mothers and children in all experimental groups exhibited greater increase in scores on job information than did their counterparts in the control group.

When viewed apart from mothers, however, no significant differences were observed between experimental and control groups of children in terms of changes in job information scores. When urban children were divided by sex, significantly more girls in the experimental than in the control group attained higher job information scores on the after test.

4. As a result of the experimental program, there was a reduction in the distance between the child's level of occupational aspiration and his occupational expectation. The experiment had differential effect between the sexes as to the anticipated level of job prestige, with an increase in level for the boys and a decrease for the girls.

   Occupational aspirations were high, but not unusually so for this socio-economic group. A majority of the total group aspired to professional occupations. Occupational aspirations of boys were more diversified than those of girls, of whom over 60 percent selected either teaching or nursing as a career of choice.

5. The experimental program appeared to have no effect upon the children's academic motivation as anindirect result of interaction with their mothers. No significant relationship was observed between positive and negative scores and sex of the child or between the experimental and control groups. Academic motivation seemed to be entirely independent of the experimental condition. With the subjects of this study, educational aspirations were so high before application of the experiment that the resultant low ceiling on aspirations permitted little noticeable change.

   Similarly, no significant differences were found as a result of the experiment between what mothers aspired to and what they expected in the level of occupations for their children. When adjustments were made for characteristics likely associated with this differential, a significant difference among sub-cultural groups was found. A positive change was observed for urban Negroes, no change for rural whites, and a negative change for rural Negroes.

Results of the experimental program have at least four important implications. First, conditions created by the experimental program have a demonstrable effect of increasing mother-child interaction with regard to career planning.

When Sandis (1968) investigated the influence of parents on students' educational plans, she found that high parent-child consensus on educational plans seemed to be independent of parent's educational background or children's scholastic standing. She also found, however, that parent-child consensus seems to depend on the child's perception of his parent's plans for him and that the parent's plans are one of the stronger predictors of the student's educational plans.

It is reasonable to assume that one outcome of increased mother-child communication would be a clearer perception by the child of his parent's plans for him in the world of work as well as education. Regardless of the background characteristics of the parent, because of her importance to the child, a mother can be equipped to exert an unequalled positive influence upon a child's career orientation. The improved communication, regardless of the content, may serve as a reinforcer of the child's motivation to achieve.

Secondly, these data imply that in the world of career planning mothers may exert a greater influence upon their daughters than they do upon their sons. A significant difference was found between control and experimental girls, but not boys, with regard to amount of time spent thinking about occupational possibilities. Perhaps the difference in the experimental effect shown is merely that mothers and daughters spend more time together, so that in a short period of time there is more possibility of communication.

Moss and Kagan (1961) found evidence to suggest that maternal encouragements of intellectual achievement tends to have a greater influence upon the intellectual development of girls than boys. As was pointed out by Walters and Stinnett (1972), most of the literature is concerned with mother-child relationships, but there is increasing evidence that fathers also exert considerable influence upon their children.

In the particular sphere of work and its requirements, the data of this study imply that there are others more important to adolescent boys as significant persons than their mothers. The literature on adolescence generally seems to diminish the importance of parents and increase the importance of peers in terms of impact upon the adolescent's role learning. Some decisions of youth reflect parental values and others reflect those of age mates (Walters and Stinnett, 1972). The mother may not be the best intervenor in the case of the adolescent male.

Thirdly, it seems incontrovertible that parents engaged in the experimental program not only enhanced their capacity to assist and encourage children in career planning, but actually enjoyed the exercise and were themselves benefitted by it. The objective data results and the unanimous subjective assessment of leader participants indicate that the mothers welcomed involvement in such an important matter.

The implication of this finding is that the more parents can be involved in the conscious life planning of their children, the greater will be the benefit to the children. These findings are in agreement with previous ones dealing with parent-child relationships. For example, in a study by Willmon (1967) it was observed that parental involvement in Head Start Programs aided in the development of academic achievement, and that higher parental participation accompanied even higher achievement. The implication is that anti-poverty programs geared to upgrading academic achievement in children should involve the parents as much as possible and also provide an educational program for them.

Walters and Stinnett(1972) concluded that parental warmth is a factor which influences occupational choices among children as well as their academic achievement. Evidence obtained in this study implies that low-income mothers abound in the quality of warmth as exhibited in sincere interest in the welfare of children. In spite of the difficulties of life regulated by lack of academic well-being, these parents have great resources of personal strength and sincere parental caring.

High aspirations of children may reflect this, however unrealistic they are. Lacking other resources, low-income parents may use the warmth of their relationships with children to achieve as much as possible.

The fourth implication of this study is that no experimental program can be expected to have undirectional results, especially when the objective is to influence children through their parents. In their ten-year review of research in parent-child relationships over the 1960-1970 decade, Walters and Stinnett concluded that there is reason to distrust any simplistic explanation of causality in parent-child relationships. Children themselves are powerful influencers and an interaction effect between them and their parents is often operative even if unknown. The experimental condition in this study appeared to cause a variable effect among the three subcultures in several instances.

To know what effect any variable may have upon children when applied to their mothers, one must be able to state the contingent conditions. As slight changes in a population occur, so may the outcome of parent-child relationships. It is unlikely that any experimental program would affect a variety of subcultures in a uniform way.

The final assessment of the group discussions as a vehicle for affecting the educational and occupational plans for low-income youth may be stated simply. Such a program is fraught with difficulty. Too much must be accomplished in too brief a span of time. The target population may have limited abilities, as in reading, and are likely to have more immediate and more varied needs than those on which the discussions center.

In spite of these drawbacks, however, the group discussions worked. The stated objectives were achieved. The experimental program may not be the most effective or the most efficient possible. But the evidence seems clear that such group discussions are one way in which direct, positive intervention may occur in the life direction of low-income youth.

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CHAPTER XI

SUMMARY AND CONCLUSIONS: WHAT HAVE WE LEARNED?

When one comes to the conclusion of a research study and attempts to distil out of a mass of data the most significant and conclusive findings, it is perhaps almost inevitable that some of the objectives will not have been attained in the degree that had been projected a few years previously. It also frequently happens that there are serendipitous findings which turn out to be more important than some of the anticipated results, and some of the simplest findings are more significant than those derived from complex analyses. Finally, no research ever answers all of the pertinent questions about the issues involved, so that one ends with pointing up implications and hypotheses for further research.

All of the above is true of the S-63 studies; yet, as we look back and assess, we think that we have made some important contributions to the understanding of the status attainment process. Substantive and methodological findings and implications will be highlighted and discussed here in terms of basic knowledge, policy and applied programs, and the conduct of research. Following that, we look at what we have left unanswered and make some suggestions concerning next steps in career research.

What have we added to basic knowledge?

Along with a number of other studies made during the past ten or fifteen years, the S-63 data confirm the high educational and occupational status projections of today's youth, almost regardless of socioeconomic status, race, age, sex, and rural-urban residence. In contrast to what studies in the Fifties and earlier showed, our baseline survey data show only small differences in the stated aspirations and expectations of youth who differ on these variables. Clearly, the problem is no longer that of raising the aspirations of lower status youth. No doubt the communications, civil rights, and black "revolutions" have had much to do with this change.

But despite the current "revolution" in the role of women in our society and the unisex trend, our data show substantial differences in the occupational aspirations of boys and girls, and of their mothers for them. Girls and their mothers focus strongly on three traditional "status" occupations for women: teacher, nurse, and secretary. But that change is in process, even in the relatively deprived subcultures that we studied, is indicated by the fact that the daughters aspire to higher occupational and educational levels than their mothers project for them, and especially by the substantial differences in many respects between urban black girls and their mothers. The boys' projections ranged much more widely in status level than the girls' from the highest professions and professional athletics to semi-skilled and unskilled occupations. Their mothers were largely in agreement with them, but tended to project somewhat higher status levels for the sons than the sons themselves projected.

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Overall, our findings suggest that there is a single status projection process operating among our respondents, rather than separate processes for boys and girls, blacks and whites, and rural and urban youth. The similarities we found are far more numerous than the differences, and some of the differences are not very large. This is not surprising if it is a correct view that America is one society and has one universal culture, with such subcultures as we have shaping the lives of their members in more limited ways.

Since there is a paucity of career aspirations studies among youth below the high school level, we were not sure when we planned the S-63 studies how successful we would be in communicating with fifth and sixth grade children of these racial-residential groupings, most of whom probably read well below their grade level, and how meaningful their responses concerning careers would be. But despite the inadequacy of some of our tools it appears that we largely overcame the communication barrier. Moreover, it is clear that these children, like the middle-class high school youth most often studied, have internalized the almost universal status hierarchy of occupations and the American values concerning formal education, and we think their verbal statements of aspirations reflect these more than anything else.

This brings up one of the most important theoretical issues of the study--and of research on the career process in general. Since the publication in 1951 of Occupational Choice by Ginzberg et al, the developmental theory, which says that youths' career choices go through a specific sequence of stages and become more "realistic" as they mature, has been dominant in this field. S-63 was designed within the framework of this theory but in the process of the study we came more and more to question its assumptions and have shifted somewhat to a cultural values interpretation, which says that both aspirations and expectations mainly reflect the internalization of societal norms and values as they relate to education and occupations. Haller and associates in a current (1974) article lend support to the latter interpretation through their factor analysis showing that Level of Occupational Aspiration (LOA) has only one underlying factor, which includes both "aspirations" and "expectations." Furthermore, their data show that LOA does not change over time.

Though we had conceptualized aspirations and expectations as separate variables, in keeping with much of the research in recent years, when our baseline data came in it was soon evident that the children did not differ much in their responses to the two types of question, so far as overall frequencies were concerned. Preliminary analysis also showed little difference in the correlation of the two measures with other variables. Moreover, practically no relationships to other variables were discovered when the gap between aspiration and expectation was correlated with other study variables. The decision was then made, largely on methodological grounds, to average aspirations and expectations into a single measure for educational projections and one for occupational projections. The same was done in the case of the mothers' projections, even though the mothers' aspiration and expection responses concerning their children did differ more than the children's. The lack of differentiation between aspirations and expectations might be interpreted as a function of the age of our youth sample, and no doubt it is, in some degree. The very fact that the mothers do differentiate somewhat more--but still not a great deal--suggests this and perhaps provides limited support for the developmental theory of status projections. But other recent studies of older youth have shown that they don't differentiate much more than our elementary school children, suggesting that young people don't really become much more "realistic" in their projections as they grow older, at least not through the high school ages. We hope to test this on some of the subjects in the sample by reinterviewing some of them as high school juniors and seniors in a planned longitudinal study.

In contrast to the similarity of the children's stated aspirations and expectations, our data suggest that the origins of educational and of occupational projections are not as similar as has been assumed, and that they should not be combined into a single measure of ambition. While the levels of stated aspirations and expectations are rather uniformly high for both, educational and occupational projections depend in our sample on somewhat different antecedent variables and paths of influence. Educational projections, for example, appear to depend more on measures of individual traits (IQ, self-concept, liking for school, and family background) than do occupational projections.

The children's projections are closely related to their mothers' projections for them. Presumably there is two-way interactive influence, though we have assumed in the analysis that the mothers' projections are prior in time and intervene between other influences,family background, child's self-concept, IQ, the characteristics the mothers value in their children, and the children's perceptions of their parents and the children's projections. As already noted, however, boy-mother projection patterns differ somewhat from the girl-mother patterns.

Though the statistical analysis shows that the sex of the child is a greater differentiator of status projection patterns than are race or rural-urban residence, there are nonetheless some differences between the race-residence groupings. These differences are more in the means of the variables than in the regression co-efficients. However, the lack of an urban white sample prevents a full assessment of what can be attributed to race and what to residence. Rural and urban blacks differ as often as they are alike, and rural whites and blacks differ. In general, the rural whites in the sample seem to conform somewhat more to the findings of other studies than do the other race-residence groupings. The two black subgroups deviate from the findings for whites in the lower parental influence disclosed, especially the lower influence of the mother's projections for the child.

Despite the very real questions about the extent to which IQ tests measure basic ability as opposed to cultural learnings specific to one's class and background, our data suggest that the IQ score is a "real" and important variable, since it is related to a number of other variables, and the relationships conform generally to expectations. The influence of IQ on the child's educational projections is strong, but, surprisingly, it is not shown to be very influential on the child's occupational projections. However, it is strongly related to both the educational and the occupational projections of the mothers. Since we administered our own IQ tests and the results were known only to us, this relationship indicates that the mothers' perceptions of their children's success related behavior correspond generally to the scores. Moreover, there must be some awareness on their part that occupational attainment is contingent upon the same dimensions that are measured by the IQ test.

Urban black boys and girls are an exception in that IQ has a direct influence on their occupational projections. This suggests that urban youth, more than rural youth, may be aware of the relationship between occupational success and scholastic ability and attainment. This could derive from the nature of urban occupations. But, again, the absence of an urban white sample makes it uncertain whether this is an urban characteristic or is restricted to urban blacks.

It should be kept in mind in considering the influence of IQ that the distribution of scores in our sample is concentrated on the low side of the scale, with more below 100 than above. Moreover, a good many children scored less than 70 and most of these were omitted from the study on the grounds that they might not understand the questions sufficiently to respond accurately. If the scores for our sample had been distributed in the normal range, it is possible that the influence of IQ on other variables would have shown up as even stronger.

Our data show that the influence of socioeconomic status and family background is strong and important but more indirect than previous research has indicated - that is, family background is largely mediated by other variables. The unusually large number of cases and range of variables available in the present study made possible the more refined analysis that disclosed some of the steps in the paths of influence from family status variables to the children's projections. The fact that our sample is made up entirely of low income households and yet differences within the relatively narrow range of their education, income, and social participation levels make a difference in the status projections of the children suggests that these background factors would be even more influential in a sample of all socio-economic levels.

A pioneering aspect of the present study was the inclusion of the child's perception of the mother's loving, demanding, and punishing behavior, using questions developed by Bronfenbrenner. We are not aware of any published research testing the relationship of these variables to status projections. As expected, these were found to be rather strongly related to the child's self-concept--punishing, negatively, and loving and demanding, positively. However, their influence extends only indirectly to the child's educational projections, mediated by the child's liking for school. They had no influence on his occupational projections. While our data suggest that these variables are not very important among aspirations influences, their strong influence on the child's self-concept make it important that they be included in future research on self-concept. Despite much theoretical literature on the influence of child-rearing practices, there have been almost no other empirical studies using Bronfenbrenner's factors.

The variables with major *direct* effects on the children's occupational projections are the mothers' occupational projections for the children, the mothers' behavioral values for the children, and the children's reported talking with parents about career hopes. The main factors with *indirect* effects on the children's occupational projections are family background and IQ mediated by the mothers' status projections. The factors with major *direct* effects on the children's educational projections are liking for school, IQ, and the mothers' educational projections for the child. The main factors with *indirect* influence on the child's educational projections are self-concept, IQ, and family background, mediated by the child's liking for school and the mother's educational projections for the child.

Thus the importance of the mothers in the career projection process is indicated by the fact that the mothers' projections show up both as direct influences and as mediating variables. But the linkage is specifically from educational projections to educational projections and from occupational to occupational, rather than from one to the other. IQ is linked both directly and indirectly to the child's educational projections, but its influence on the child's occupational projections is mainly through the mothers' projections. Family background, on the other hand, appears only as an indirect influence, indicating that it does not "automatically" increase the children's aspirations. Not surprisingly, liking for school both directly and indirectly increases educational projections, but it does not show up as a significant influence on the child's occupational projections. Why the mothers' behavioral values for the child -- her emphasis on "character" or "outgoingness"-- should have a direct influence on occupational projections but only an indirect influence on educational projections is not entirely apparent.

In concluding these highlights of the baseline study findings, we raise without answering the question to what extent the statistical mother-child relationships found in the study represent real-life dynamic influences that can be harnessed or manipulated to improve the career attainment process? It was hoped that experimental phase of the study would throw light on this kind of question.

The experimental study design was first formulated in an atmosphere of committee disenchantment with the passive methods of survey research using pencil and paper questionnaires, and a willingness to try a more active experimental approach to learning about the children. It was also born out of some lingering suspicion that low aspirations of children in poverty subcultures may be a factor limiting their status mobility. The exact nature of the experimental variable--the group meetings for mothers--was to be decided as analysis of the baseline data allowed us to suggest just what variables might be most useful in raising aspirations or making them more realistic. As it turned out, the data analysis not only proved to be more complicated than we had foreseen, but by the time we came to planning the details of the experiment, our theoretical and policy assumptions were shifting, and the experimental phase design reflected these later changes in thinking.

The data showed that the children, and their mothers too, held high expectations as well as aspirations. Thus, rather than being a limiting factor, the projections began to be seen as holding the threat of future frustration. Additionally, the results of the regression analyses showed only moderate correlation among the study variables. They were difficult to interpret, and, thus, it was not clear which variables might be used to influence the children's aspirations, even if we had been able to agree on whether to raise or to lower them.

Other studies had shown that an increase in knowledge rather than more basic attitudinal and behavioral changes is the experimental effect most likely to be obtained from short-term treatments. Consequently, when it was suggested that improving the child's information concerning career choices would certainly be useful no matter which direction his aspirations ought to go, the proposal was adopted; and the content of the experimental phase treatment as well as its major dependent variable were laid down.

The experimental "treatment" given to a sub-sample of the mothers--the three lesson-discussions--resulted in very little increase in knowledge about jobs and education, either on the part of the mothers or through them on the part of the children. But our "treatment" was, perhaps, too little and too general to expect much learning about the specifics of education and jobs. We probably did not measure the most important kinds of potential learning, and our measures were, perhaps, somewhat crude. The fact that rural Negro mothers appeared to increase their knowledge the most and they were the least knowledgeable mothers at the beginning might be gratifying, except that the change could simply be due to their understanding the questions better on the second asking. Girls appeared to gain more knowledge than boys through the "treatment" given the mothers, and this may be a real difference reflecting better mother-daughter than mother-son communication.

Despite previous research and theory--and some evidence in our baseline data--that suggests a cross-sex parent-child influence, the experimental results open the possibility that, in this particular stage of the child's adolescence, mother-daughter communication is more intensive and thus faster or more effective. It may be that more attention or special procedures are required if the influence of mothers on sons is to be increased at this stage or that other agents of influence might be more effective than mothers in influencing their sons.

And of course there are many reasons to believe that procedures to increase the constructive influence of fathers on adolescent males would be helpful. Since we did not obtain information directly from fathers we have no direct research evidence on this. But such procedures would be limited by the absence of fathers in many of the families in these subcultures.

The experimental treatment brought little change in the status projections of either mothers or children. In view of the already high levels of these projections, an increase was not expected. The possibility that the projections might have become more "realistic" was complicated by the problem of deciding what is "realistic" and limited by the low intensity of the treatment. But if status projections primarily reflect cultural values, it would not be expected that they would become more "realistic" and such a framework would be inappropriate.

The treatment did increase substantially the number of mothers saying that they had talked to their children about careers and the number of children saying they had talked to their parents and had thought about careers. While this response may be mainly verbal rather than reflecting actual behavioral change, the lesson-discussions may have started or emphasized a process that will have more pay-off in the future.

What have we learned concerning methodological issues?

There seems no question that having data for mother-child pairs rather than just for the children has enriched our study, even though it has made the analysis more complex. It would have been useful to have data for fathers also, but hindsight confirms the decision, given limited resources, to choose mothers over fathers. We would like to see our findings tested by replication of the mother-child sample and the measures we used.

Concerning the baseline survey, there are a number of methodological issues which are common to many other recent attempts to examine the processes underlying status projections. There are also some methodological limitations and questions that are more or less unique to this study.

The common methodological issues center around questions of the appropriateness of: (a) the hypothetical sequence of variables depicting the status projection process, (b) the use of regression analysis; and (c) the inclusion of a relatively large number of independent variables to explain status projections.

It must be acknowledged that the cultural, social, and psychological processes underlying status projections are, in reality, more complex than survey methodology can reconstruct. The hypothetical sequence of variables is merely an approximation of such processes. We cannot prove from the data the time sequence assumed, and of course most of the relationships are bi-directional. Still, the sequence of variables assumed is not arbitrary, but is a systematic summary or synthesis of research findings that are pertinent to the study of status projections. Hindsight at the conclusion of the research does not suggest to us that we should have assumed a different sequence.

We chose to use the methods of regression analysis rather than analysis based on measures of association. The usual measures of association--zero-order correlations or contingency table chi-squares-- would not have disclosed the large degree of spuriousness and the indirect effects among the variables. The fact that numerous "traditional correlations" were found to be spurious or the variables indirectly influential would seem to justify the continued use of regression analysis in similar studies. Likewise, our results raise serious questions about future findings based solely on the usual measures of association.

Whereas other studies have been criticized for omitting some relevant independent variables, the "exploratory" nature of the present study has resulted in the inclusion of most relevant variables identified in aspiration literature. Although the number of variables becomes cumbersome at times, this richness of variables may have enabled the ferreting out of true relationships for these somewhat atypical subjects. Because the literature on which this study was based derives primarily from studies of older, more academically able, and more socioeconomically diverse students, some of the hypothesized relationships were perhaps unwarranted. But we are inclined to believe that our exploration of numerous variables will be useful for comparative purposes.

In view of the relatively large number of independent variables, the effectiveness of our model in explaining the dependent variables, especially occupational status projection, may be challenged. There are several reasons why the model appears to have low predictive value, as indicated by the low amount of explained variance in the dependent variables--that is, around 15 to 30 percent. First, the coefficients of determination (R^2s) are reduced in size, just as the correlation and regression coefficients are diminished, by the considerable amount of measurement error in some of the scales. It would be gratifying if we could eliminate artifically depressed levels of association and know the "real," higher levels, but it would be equally important to be sure that some of the differences we found are real and not due to undetected error.

The measurement error in the instruments and low explained variance in occupational and educational status projections may be attributed, in part, to the age and relatively low academic level of the students, and the low level of educational attainment of the mothers. This interpretation is consistent with the observation that in aspiration studies the amount of explained variance varies directly with age and socioeconomic characteristics of the respondents. A low level of explained variance, however, tends to be characteristic of most survey research, and in aspirations research samples of older, middle-class respondents often yield similar levels of predictability. Given the subject of this study and the characteristics of the respondents, the amount of variance explained is gratifying.

Concerning experimental design, which has been little used in status projection research, our experience has certainly demonstrated its costs and difficulties. Analysis of the experimental data was hampered by the small number of cases in some cells, even though we had an adequate experimental sampling plan and an unusually large baseline sample from which to draw subsamples. Hindsight shows that we should have had more rigid control over implementing the experimental phase plan. The costs of experimental design are emphasized by the fact that we found it necessary, in designing the experimental phase, to move down from our earlier, more grandiose plans, to an experimental treatment involving only three meetings of the mothers. We knew when we reluctantly made this decision that we could not realistically expect much measurable change from so little experimental input. This forced us to project mainly change in knowledge, as opposed to change in attitudes and interests, and, even here, hindsight suggests it was probably unrealistic to expect much change. We probably should have followed up the three meetings with periodic contacts and information over a period of six months or a year.

Our experience further reminded us of the difficulties of occupational coding from survey data, particularly when children and adults of rather low education are the respondents. This is mainly due to the problem of respondents not knowing or giving enough detail about the level of responsibility or competence involved in a job or using occupational terms loosely, but it also is related to ambiguities in the available coding schemes.

Aside from the specific problems of occupational coding, centralized coding and data processing for the entire study would have been more efficient and more desirable from the standpoint of minimizing error and controlling variant interpretations of the coding system. Hindsight also suggests that we should have had stronger centralized control over field procedures and time limits for schedule administration, as well as experimental procedures.

We did not make a conclusive test of the advantages and disadvantages of paying the mothers who participated in the experiment. This was done in most of the states, and it did not seem to damage relations, create an artificial situation, or set a bad precedent. But how much incentive it actually provided is unclear, since we did not have a control group of uncompensated mothers. However, the promised small payment did not seem to *insure* regular attendance to the extent some of us had expected.

We found that low-income mothers are interested in career possibilities for their children--or such interest can be kindled--but they are poorly informed, and the subject is not very salient. For better or worse, the middleclass tradition of parents projecting and planning careers for their children, and socializing them in terms of such expectations, does not seem very prevalent in these families. If the life chances of children in these families are to be equalized--or the gap between them and the children of middle-income families narrowed--it seems clear that special attention and "affirmative action" is required.

Moreover, serious career-thinking is not very salient--either for children or mothers--as regards children of the ages we studied. This is particularly true of mothers who also have high school or college-age children who must make career choices very soon. The elementary or junior high child's career is low priority in this situation. Yet some thinking, planning, and academic motivation and performance *before* high school is necessary if the child's chances of achieving the higher status occupations--or even a personally satisfying occupation--are to be maximized. The relation of schooling and academic planning and striving to occupational success needs to be propogated.

The impact of schools and school counselors on the children's knowledge and thinking about careers seemed much less than we had assumed, so far as these areas and our respondents were concerned. Most of the elementary schools did not have counselors, and there was little evidence that classroom teachers had given much attention to career education. Where counselors were present in the secondary schools, they were often spread so thin that students had to ask for help in order to get it. Thus, there is clearly a need for other agencies and approaches to be involved, as well as for the schools to be concerned with career education and to do a good job in implementing such programs.

The initial planning for our study was done largely in terms of the assumptions and hypotheses of developmental theory, but our findings and interpretations emphasize more the cultural values basis of status projections. Thus, before a replication of our experimental phase or a similar study is undertaken, the assumptions, objectives, and content of the program should be reexamined in the new light. The baseline study instruments also reflected the developmental theory orientation, but a new orientation would probably change them less than would be the case with the experimental phase.

Both for further experimental studies and for programs designed to use the group lesson-discussion approach to career education, the findings of the present study could be used to tailor some of the content of the sessions to persons of different racial, residence, and class background, and to boy-girl differences and similarities as regards career thinking and possibilities.

Similarly, attention in such programs could be directed in part to increasing the accuracy of the child's perceptions of his parents' (mother's) aspirations for him. If this were coupled with devices to increase the "quality" of the parents' projections, it could improve the career process, since the present study provides evidence that children do tend to reflect their mother's projections and parent-child consensus on the child's career line should enhance the possibility of achievement.

Are there implications for application?

Though we do not have "proof" in the strict sense, it seems clear to us that a group approach to career exploration "works" for mothers and that this offers promise as a means of influencing children's thinking. But such an approach will have to involve more intensive "treatment," both in the sense of more meetings over a longer period of time, conveying and discussing more specific information, developing procedures to secure group commitment by the mothers to learn about careers and discuss them with their children, and possibly some individual counseling with mothers rather than group meetings only. Further experimentation should involve much more intensive input and should assess the difficulties and advantages of securing such involvement by the participants.

Some of us, however, have been surprised at the seemingly low interest in some areas or activity of the Extension Service and counseling agencies in group approaches to career education, based on limited experience during the study in discussing with personnel of such agencies how our approaches and findings might be applied. It may be that such agencies will have to be "sold" before enough interest will be generated. It may also be that reconsideration of including career education in their role is needed.

The present study seems to have demonstrated the availability and usefulness of local resource persons in group approaches to career education. It does not seem necessary to bring "experts" in from distant places when there are personnel workers in local industries and counselors from local colleges who can be called on. In fact, reference group theory and our experience in the experimental phase of the study suggest getting the local boy or girl "who made good" to explain that he or she started from about the same situation as the present youth in the area and what he did to "make it" should promote the feeling of "If he can do it, I can.

In planning the lesson-discussions some members of the research group were dubious about using seemingly unrelated craft activities (flower-making and bottle decoration) to hold the interest of the mothers and illustrate points about child development and career thinking. But in the implementation of the experiment all became convinced that these and the refreshments and socializing were functional.

The group approach and the techniques used in the present study might also be tried out for working directly with youth in career education, as well as working through their mothers. They would seem to offer promise for 4-H clubs and similar youth organizations as well as for school counselors to extend their programs beyond the school walls.

What can we suggest for future research?

It would be gratifying to be able to lay aside the research questions we started out with as substantially answered and recommend to future researchers that they start with these "facts" and move on to new questions. But like most researchers, we end with recommending that future studies try further to answer some of the same questions, by replication and/or new approaches. These unanswered or only partly answered questions have been indicated in the first part of this chapter.

In general, we feel that there should be many more career studies of children in the elementary and junior high school ages, especially longitudinal studies that follow them through high school and into the job market. To gain deeper insight into the career orientations and the career process in low-income families and subcultures, it would seem important to have some in-depth interviews and anthropological-type studies as well as survey research. We know that the life chances of children born into these families are lower than those in more affluent situations, but we don't really know to what extent improvement in their life chances can best be achieved by alterations in the overall social structure and distribution of power in our society as compared to attempts to change the subculture. Are there, in fact, viable subcultures corresponding to the racial, residential, and income categories used in our study and to what extend are they relevant to the career process?

Whether or not there are real subcultures, it seems important to sort out rural-urban and black-white differences, and this cannot be done without a low-income white urban sample. The three racial-residence categories of the present study were chosen because they are highly visible deprived groups in the Southern region that have been the objects of recent national concern. For scientific reasons urban whites should have been included.

We hope that our focus on a younger age category that has been neglected by previous research on youths' aspirations will provide the basis for a comparative linkage with studies of older, disadvantaged youth. To further facilitate comparative analysis some future research should also focus on the status projections of elementary-school students from more affluent backgrounds.

Although the current thrust in aspiration research is toward analytical studies such as ours, there is ample evidence of the need for more detailed descriptive studies. The qualitative differences in boys' and girls' occupational projections raise several questions for future research. Given the heavy concentration of the girls' responses on a few occupations, do girls' choices become more diverse through time? The parallel narrowness of their mothers' projections for them, however, suggests that a culturally ascribed definition of "women's jobs" was operating on all our female respondents. Given the contemporary changes in womens' roles in our society, longitudinal studies of young females of diverse socioeconomic backgrounds are called for. Longitudinal analysis could also indicate whether the more diversified responses of the boys become more focussed over time.

We still believe that more policy-oriented experimental studies should be carried out, despite the paucity of definitive results from the present study. When we planned our study the main emphasis and expectations were on the experimental phase, with the survey seen primarily as providing a baseline for the experiment. The main results however were survey data and analysis. Does our experience indicate that experimental design is intrinsically inappropriate or too difficult to implement? Is the survey approach really the most valuable or most important, or are we and most other researchers simply more used to and more comfortable with static survey methods? Can we make the necessary input and commitment to design and carry out a good experiment in this field? Besides the effort to influence the children through group meetings of the mothers, what other methods of influencing the career process might be tested by experimental method? What about the possibilities of joint or coordinated efforts of school, Extension Service, and even church or civic groups?

A major thrust in our interpretation of the present study has been that youths' status projections reflect the internalization of cultural values and the societal status hierarchy rather than "planning" or a developmental choice process. But the study was planned mainly within the assumptions of developmental theory. Thus, we would urge that some future studies be designed on the basis of the cultural values assumptions, so that there could be further tests of these alternative explanations.

Youth status projections are actually a part of a broader process of anticipatory socialization going on within children, and studying other aspects of this process could throw light on status attainment. Some parallel issues concerning the age and social categories we studied deserve further research attention and might be studied in somewhat the same ways we tried or propose. Preadolescent projections for marriage and family, parent behavior, place of residence, public service, social participation, goals, values, and life satisfactions--and the changes in these over time as well as the factors influencing them--might be incorporated in a broader anticipatory socialization model.

Finally, there is a big question relating to the goal of the career-choice process itself. In research terms this is the conceptualization and operationalization of the dependent variable. In policy terms this is the issue of whether it is socially desirable to promote universal striving and attainment in terms of moving up in a status hierarchy, reflected by type of occupation and income?

Practically every study to date, certainly including ours, has used status projections or attainment as the dependent variable, apparently with little questioning of the assumption that this is the desirable end. But it is a contradiction of terms to think of everyone reaching high status. Clearly there are other definitions or dimensions of success, life satisfaction, or quality of life that are a part of the career process. Perhaps we ought to be working on new societal norms relating to careers rather than merely observing the internalization of the existing norms. We would like to see research address some of these issues.

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APPENDIX A

STUDENT SURVEY FORM

BASELINE QUESTIONNAIRE

AND

EXPERIMENTAL PHASE BEFORE AND AFTER TESTS

The questionnaires in this appendix appear as they were used in the study except for the addition of some phrases which name the variables being measured and the source of the scale or items. These phrases are printed in italics (script style).

BASELINE PHASE

SURVEY OF STUDENT PLANS FOR WORK AND SCHOOL

ITEMS 1-7

(Background Information)

1. Name ______________________________

   State ______________________________

   School ______________________________

   Grade ________________

2. ____1. Boy
   ____2. Girl

3. Parents' Name ______________________________

4. Address (give road or street and number if possible)

   ____

   ____

5. Telephone Number ________________

6. How old are you?

____1. nine	____4. twelve
____2. ten	____5. thirteen
____3. eleven	____6. fourteen

7. Do you live with your mother (or stepmother)?
   ____1. no
   ____2. yes What is her name? ______________________________
   FIRST MIDDLE LAST

We are interested in finding out something about your future plans, and would like to know your feelings about certain things. This is NOT a test and there are no right and wrong answers. I will read each question out loud and you read it to yourself as I read it, then check the answer which is closest to your feeling. MAKE SURE THAT YOU ANSWER EACH QUESTION. REMEMBER, WE WANT YOU TO ANSWER EACH QUESTION IN THE WAY THAT SEEMS BEST TO YOU.

I. FUTURE PLANS FOR WORK AND SCHOOL

ITEMS 8-16

(Occupational Aspirations and Expectations)

8. Have you ever thought about what kind of job you might have when you grow up?
   ____1. yes, a lot
   ____2. yes, a little
   ____3. no

p 216 blank

9. a. If you could choose any job you wanted, what kind of job would you really like to have when you grow up?

____

b. How far do you have to go in school to get that kind of job?

____1. finish 8th grade
____2. finish 8th grade and go to a trade school
____3. finish high school
____4. finish high school and go to a trade school
____5. finish college
____6. don't know

10. What kind of job do you think you really will have when you grow up?

____

11. Put a check by each of the people who have talked with you about the kind of job you might have when you grow up? (You may check more than one.)

____1. mother
____2. father
____3. older brother or sister
____4. another relative
____5. teacher
____6. preacher
____7. adult friend or neighbor
____8. other kids
____9. other (Who? ______________________________)
____0. no one

12. Whose advice is most important to you about your future plans? (Check only one.)

____1. mother
____2. father
____3. older brother or sister
____4. another relative
____5. teacher
____6. preacher
____7. adult friend or neighbor
____8. other kids
____9. other (Who? ______________________________)
____0. no one

13. If you had your choice, how far would you like to go in school?

____1. 8th grade
____2. 1 or 2 years of high school
____3. go to a trade school instead of finishing high school
____4. finish high school
____5. finish high school and go to a trade school
____6. 1 or 2 years of college
____7. finish college

14. How far do you think you really will go in school?

____1. 8th grade
____2. 1 or 2 years of high school
____3. go to a trade school instead of finishing high school
____4. finish high school
____5. finish high school and go to a trade school
____6. 1 or 2 years of college
____7. finish college

15. Put a check by each of the people who have talked with you about how far you should go in school.

____1. mother
____2. father
____3. older brother or sister
____4. another relative
____5. teacher
____6. preacher
____7. adult friend or neighbor
____8. other kids
____9. other (Who?____________________________________)
____0. no one

16. How far do you think your parents would like you to go in school?

____1. 8th grade
____2. 1 or 2 years of high school
____3. go to a trade school instead of finishing high school
____4. finish high school
____5. finish high school and go to a trade school
____6. 1 or 2 years of college
____7. finish college

17. How do your parents feel about your finishing high school?

____1. they insist I finish
____2. they would rather I finish
____3. they don't care
____4. they would rather I didn't finish
____5. they won't let me finish

ITEM 18

(Talking with parents about education)

18. Have you ever talked to your parents about dropping out before finishing high school?

____1. yes, a lot
____2. yes, a little
____3. no

ITEMS 19-24

(Elder -- Academic Motivation)

II. FEELINGS ABOUT SCHOOL. Read each statement as I read it and check one answer that best tells me how you feel about school.

19. I am interested in my school work

____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

20. I really try to get good grades

____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

21. I study or read at home

____1. about every day
____2. two or three times a week
____3. about once a week
____4. hardly ever
____5. never

22. When the teacher gives us homework, I finish it

____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

23. When I get a grade I don't like, I try hard to do better

____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

24. If I had my way about coming to school, I would come

____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

III. GENERAL QUESTIONS. Read each statement as I read it and check one answer that best tells how you feel.

ITEMS 25-44

(Weiner -- Achievement Motivation)

25. I prefer

____1. working with others
____2. working by myself

26. I prefer jobs

____1. that I might not be able to do
____2. which I'm sure I can do

27. I would rather learn

____1. fun games
____2. games where I would learn something

28. I prefer a game

____1. where I'm better than anyone else
____2. where everyone is about the same

29. I would rather

____1. play a team game
____2. play against just one other person

30. I would rather

____1. wait one or two years and have my parents buy me one big present
____2. have them buy me several smaller presents over the same period of time

31. When I am sick, I would rather

____1. rest and relax
____2. try to do my school work

32. I
____1. like giving reports before the class
____2. don't like giving reports before the class

33. Before a class test I am
____1. often nervous
____2. hardly ever nervous

34. When I am playing in a game or sport I am
____1. more interested in having fun than in winning
____2. more interested in winning

35. When I am sure I can do a job
____1. I enjoy doing it more
____2. I become bored

36. When I play a game
____1. I hate to lose
____2. I love to win

37. After summer vacation I am
____1. glad to get back to school
____2. not glad to get back to school

38. I talk in class (answer questions or discuss)
____1. less than other students
____2. more than other students

39. I enjoy sports more when I play against
____1. one other player
____2. several other players

40. If I were getting better from a serious illness I would like to
____1. spend my time learning how to do something
____2. relax

41. I like playing a game when I am
____1. as good as my playmate
____2. much better than my playmate

42. I prefer classes in which
____1. the students were all as good as one another at the work
____2. I was better than almost all the others

43. When I do things to help at home, I prefer to
____1. do usual things I know I can do
____2. do things that are hard and I'm not sure I can do

44. I would choose as work-partners
____1. other children who do well in school
____2. other children who are friendly

IV. MOTHERS AND CHILDREN. The following questions are about different ways that mothers act toward their children. Read each statement as I read it and check the answer which you think is most like your mother.

ITEMS 45-49

(Elder Scale)

(Child's Perception of Mother's Degree of Communication and Independence Training)

45. When she punishes me she tells me why, if I don't know.
____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

46. When she decides things or makes rules for me, she tells me why.
____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

47. When I do something she doesn't like she talks to me and explains or reasons with me, instead of punishing me.
____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

48. Does she let you decide things for yourself more than she did a year or two ago?
____1. much more
____2. a little more
____3. about the same
____4. a little less
____5. much less

49. How are most things decided between you and your Mother?
____1. she just tells me what to do
____2. we talk about it, but she usually does the deciding
____3. we talk about it, but I usually get to do what I want
____4. I can do what I want no matter what she thinks

ITEMS 50-94

(Bronfenbrenner Parent Behavior Questionnaire)

(Mother's Behavior as Perceived by the Child) (loving, demanding, and punishing)

50. I can talk to her about anything
____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

51. When I go someplace for the first time, she comes with me to make sure that everything goes well.
____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

52. She says that I have to get her permission first when I want to go somewhere or play with my friends
____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

53. She makes me work hard on everything I do
____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

54. I can talk her into most anything
____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

55. She is fair when she punishes me
____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

56. She seems to be upset and unhappy when I do not behave myself
____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

57. She is happy to be with me
____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

58. She makes me feel good and helps me when I have troubles
____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

59. She worries and is afraid that I cannot take care of myself
____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

60. She wants to know exactly how I spend my money when I want to buy some little thing for myself
____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

61. She tells me that I have to do better than other children
____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

62. She lets me off easy when I am bad
____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

63. When I have to do something for her she explains why
____1. always ____4. hardly ever
____2. most of the time ____5. never
____3. sometimes

64. She makes me feel ashamed when I am bad
____1. always ____4. hardly ever
____2. most of the time ____5. never
____3. sometimes

65. She says nice things about me to other people
____1. always ____4. hardly ever
____2. most of the time ____5. never
____3. sometimes

66. I feel that she is there for me when I need her
____1. always ____4. hardly ever
____2. most of the time ____5. never
____3. sometimes

67. She tells me I can't roam or wander around because something might happen to me
____1. always ____4. hardly ever
____2. most of the time ____5. never
____3. sometimes

68. She tells me exactly when I should be home
____1. always ____4. hardly ever
____2. most of the time ____5. never
____3. sometimes

69. She tells me that I must get very good grades in school
____1. always ____4. hardly ever
____2. most of the time ____5. never
____3. sometimes

70. She finds it hard to punish me
____1. always ____4. hardly ever
____2. most of the time ____5. never
____3. sometimes

71. When she punishes me, she explains why
____1. always ____4. hardly ever
____2. most of the time ____5. never
____3. sometimes

72. She tells me, "I don't want to have anything more to do with you," when I do not behave myself
____1. always ____4..hardly ever
____2. most of the time ____5. never
____3. sometimes

73. My mother is very good to me
____1. always ____4. hardly ever
____2. most of the time ____5. never
____3. sometimes

74. She says nice things to me when I do something good

____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

75. She punishes me by sending me out of the room

____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

76. She teaches me things I want to learn

____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

77. She tells me that other children behave better than I do

____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

78. She slaps me

____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

79. She punishes me by making me do extra work

____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

80. She goes on pleasant walks and trips with me

____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

81. She wants me to run errands or do favors for her

____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

82. She punishes me by not letting me play with other children

____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

83. She helps me with my hobbies or things I like to do

____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

84. She pesters me and keeps telling me to do things

____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

85. She spanks or hits me
____1. almost every day
____2. about once a day
____3. about once a month
____4. only once or twice a year
____5. never

86. She punishes me by not letting me do things I really enjoy
____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

87. She enjoys talking with me
____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

88. She wants me to keep my own things in good order
____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

89. She punishes me by sending me to bed early
____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

90. She helps me with my school work when I do not understand something
____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

91. She tells me I am bad and yells at me
____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

92. She says she will spank or hit me if I am bad
____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

93. She punishes me by taking my favorite things away
____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

94. She wants me to help around the house or yard
____1. almost every day
____2. about once a week
____3. about once a month
____4. only once or twice a year
____5. never

ITEMS 95-116

(Lipsitt Self-Concept Scale)

V. FEELINGS ABOUT YOURSELF. There are no right and wrong answers. Answer each question in the way that seems best to you. Read each statement as I read it and check the answer that shows how you really feel about yourself, not what others tell you, but what you believe.

95. I am friendly
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

96. I am happy
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

97. I am kind
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

98. I am brave (bold, courageous)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

99. I am honest (truthful)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

100. I am likeable (I am somebody that others like)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

101. I am trusted (people have faith or confidence in me)
____1. not at all
____2. not very often
____3. some of the time
4. most of the time
____5. all of the time

102. I am good
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

103. I am proud
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

104. I am lazy
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

105. I am loyal (faithful, can be depended on)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

106. I am cooperative (I work well with others)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

107. I am cheerful
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

108. I am thoughtful (I think of others' needs)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

109. I am popular (liked by most people)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

110. I am courteous
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

111 I am jealous (envious, hurt because others have something you don't have)
____1. not at all
____2. not very often
____3 some of the time
____4. most of the time
____5. all of the time

112. I am obedient (dutiful, I do as I am told)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

113. I am polite
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

114. I am bashful (shy)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

115. I am clean
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

116. I am helpful (lend a hand, aid)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

EXPERIMENTAL PHASE
BEFORE/AFTER QUESTIONNAIRE

SURVEY OF STUDENT PLANS FOR WORK AND SCHOOL

ITEMS 1-7

(Background Information)

1. Name ______________________________

State ______________________________

School ______________________

Grade ________________

2. ____ 1. Boy
____ 2. Girl

3. Parents' Name ______________________________

4. Address (give road or street and number if possible)

____

____

5. Telephone Number ____________

6. How old are you?

____ 1. eleven
____ 2. twelve
____ 3. thirteen
____ 4. fourteen
____ 5. fifteen
____ 6. sixteen

7. Do you live with your mother (or stepmother)?

____ 1. no
____ 2. yes What is her name? ______________________________
FIRST MIDDLE LAST

We are interested in finding out something about your future plans, and would like to know your feelings about certain things. You may remember that we asked you some questions similar to these in 1969. This is NOT a test and there are no right or wrong answers. I will read each question out loud and you read it to yourself as I read it, then check the answer which is closest to your feelings. MAKE SURE THAT YOU ANSWER EACH QUESTION. REMEMBER, WE WANT YOU TO ANSWER EACH QUESTION IN THE WAY THAT SEEMS BEST TO YOU.

I. FUTURE PLANS FOR WORK AND SCHOOL

ITEMS 8-12

(Occupational Aspirations and Expectations)

8. Have you ever thought about what kind of job you might have when you grow up?

____ 1. yes, a lot
____ 2. yes, a little
____ 3. no

9. a. If you could choose any job you wanted, what kind of job would you really like to have when you grow up?

____

b. How far do you have to go in school to get that kind of job?

____1. 8th grade
____2. 1 or 2 years of high school
____3. go to a trade school instead of finishing high school
____4. finish high school
____5. finish high school and go to a trade school
____6. 1 or 2 years of college
____7. finish college
____8. don't know

c. How likely do you think it is that you will be able to get that kind of job?

____1. very likely
____2. pretty likely
____3. not so likely
____4. not at all likely
____5. don't know

d. Why do you think that? ____

____

10. What kind of job do you think you really will have when you grow up?

____

11. If you had your choice, how far would you like to go in school?

____1. 8th grade
____2. 1 or 2 years of high school
____3. go to a trade school instead of finishing high school
____4. finish high school
____5. finish high school and go to a trade school
____6. 1 or 2 years of college
____7. finish college

12. How far do you think you really will go in school?

____1. 8th grade
____2. 1 or 2 years of high school
____3. go to a trade school instead of finishing high school
____4. finish high school
____5. finish high school and go to a trade school
____6. 1 or 2 years of college
____7. finish college

II. FEELINGS ABOUT SCHOOL.

Read each statement as I read it and check one answer that best tells how you feel about school.

ITEMS 13-18

(Elder--Academic Motivation)

13. I am interested in my school work

____1. always
____2. most of the time
____3. sometimes
____4. hardly ever
____5. never

14. I really try to get good grades

____1. always ____4. hardly ever

____2. most of the time ____5. never

____3 sometimes

15. I study or read at home

____1 about every day ____4. hardly ever

____2 two or three times a weel ____5. never

____3. about once a week

16. When the teacher gives us homework, I finish it

____1 always ____4. hardly ever

____2. most of the time ____5. never

____3 sometimes

17. When I get a grade I don't like, I try hard to do better

____1. always ____4. hardly ever

____2. most of the time ____5. never

____3 sometimes

18. If I had my way about coming to school, I would come

____1. always ____4. hardly ever

____2. most of the time ____5. never

____3 sometimes

III FEELINGS ABOUT JOBS, SCHOOLING AND CHOICES IN LIFE

Now I am going to ask you some questions about, schooling and choices young people may have. After I have read the statement, check whether you agree or disagree with each one.

19. Parents should not try to help their children make a decision about a job for the future.

____1. agree ____2. disagree ____3. undecided

20. A young person should start thinking about a job before he is almost through high school.

____1. agree ____2 disagree ____3. undecided

21. The 7th or 8th grade is too early to start thinking about one's life work.

____1 agree ____2. disagree ____3. undecided

22. Whether or not a person gets a good job depends very little on luck.

____1 agree ____2. disagree ____3. undecided

23. Most people can learn all they need to know about their jobs, without finishing high school.

____1. agree ____2. disagree ____3. undecided

24. Nowadays people have to get their jobs on their own because there is no one to help them

____1. agree ____2. disagree ____3. undecided

25. A person's chances of getting a good job become less if he stays in school.

____1. agree ____2. disagree ____3. undecided

26. Since nobody knows what things will be like when he finishes school, it doesn't do any good to plan for his working life.

____1 agree ____2. disagree ____3. undecided

27. Knowing what he enjoys doing and what he dislikes doing helps a person make a better choice of a job.
____1. agree ____2. disagree ____3. undecided

28. Knowing what he is good at and what he is poor at doesn't help a person make a better choice of a job.
____1. agree ____2. disagree ____3. undecided

29. People who have a hard time with school should aim for simpler jobs.
____1. agree ____2. disagree ____3. undecided

30. If parents expect more from a child, he'll probably do more.
____1. agree ____2. disagree ____3. undecided

31. It is easier for a young person to take a new job if he had learned to decide things for himself.
____1. agree ____2. disagree ____3. undecided

32. A person may have better jobs to choose from if he is willing to move.
____1. agree ____2. disagree ____3. undecided

33. Mothers cannot help their children choose goals for their lives.
____1. agree ____2. disagree ____3. undecided

34. If someone has faith in you, you're more likely to have a good feeling about yourself.
____1. agree ____2. disagree ____3. undecided

35. Children need to know that their parents care about what they become when they grow up.
____1. agree ____2. disagree ____3. undecided

36. One of the first things in getting a good job is wanting to get a good one.
____1. agree ____2. disagree ____3. undecided

37. It is important for 7th and 8th graders to work hard in school now if they want to get vocational training later .
____1. agree ____2. disagree ____3. undecided

38. Sometimes a person can't get into the job he wants because he didn't plan far enough ahead.
____1. agree ____2. disagree ____3. undecided

39. There is no need to prepare for a job because something always turns up sooner or later.
____1. agree ____2. disagree ____3. undecided

40. A child may think a lot about what he wants to be, but he really doesn't have much choice.
____1. agree ____2. disagree ____3. undecided

41. A person is foolish to keep going to school if he can get a job now.
____1. agree ____2. disagree ____3. undecided

42. People who finish high school usually make more money later than those who do not finish high school.
____1. agree ____2. disagree ____3. undecided

43. A high school education is worth the time and effort it requires.
____1. agree ____2. disagree ____3. undecided

44. Education is no help in getting a job today.
____1. agree ____2. disagree ____3. undecided

45. Even if a young person admires someone and knows something about him, he will not try to be like him.
____1. agree ____2. disagree ____3. undecided

46. How a person feels about himself depends a lot on how he has been treated by his parents.
____1. agree ____2. disagree ____3. undecided

ITEMS 47-68

(Lipsitt -- Self-Concept Scale)

IV. FEELINGS ABOUT YOURSELF.

There are no right and wrong answers. Answer each question in the way that seems best to you. Read each statement as I read it and check the answer that shows how you really feel about yourself, not what others tell you, but what you believe.

47. I am friendly
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

48. I am happy
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

49. I am kind
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

50. I am brave (bold, courageous)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

51. I am honest (truthful)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

52. I am likeable (I am somebody that others like)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

53. I am trusted (people have faith or confidence in me)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

54. I am good
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

55. I am proud
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

56. I am lazy
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

57. I am loyal (faithful, can be depended on)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

58. I am cooperative (I work well with others)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

59. I am cheerful
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

60. I am thoughtful (I think of others' needs)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

61. I am popular (liked by most people)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

62. I am courteous
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

63. I am jealous (envious, hurt because others have something you don't have)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

64. I am obedient (dutiful, I do as I am told)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

65. I am polite
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

66. I am bashful (shy)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

67. I am clean
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

68. I am helpful (lend a hand, aid)
____1. not at all
____2. not very often
____3. some of the time
____4. most of the time
____5. all of the time

V. JOB INFORMATION

69. NOW HERE ARE SOME QUESTIONS ABOUT JOBS. PLEASE CHECK WHETHER YOU AGREE OR DISAGREE WITH EACH ONE AFTER I HAVE READ THE STATEMENT.

1. A mechanic makes more money than a pulp wood driver.
____1. agree ____2. disagree ____3. undecided

2. A waitress usually makes more money than a nurse.
____1. agree ____2. disagree ____3. undecided

3. A carpenter usually makes less money than a laborer.
____1. agree ____2. disagree ____3. undecided

4. A teacher usually makes less money than a secretary.
____1. agree ____2. disagree ____3. undecided

5. A brick layer and a carpenter usually make about the same amount.
____1. agree ____2. disagree ____3. undecided

6. Telephone operators usually make more money than maids.
____1. agree ____2. disagree ____3. undecided

70. THE NEXT QUESTIONS ARE ABOUT JOBS AND EDUCATION OR TRAINING. RESPOND WHETHER YOU AGREE OR DISAGREE.

1. A nurse has to go to school as long as a doctor.
____1. agree ____2. disagree ____3. undecided

2. There is need for more skilled auto mechanics than we have in the country right now.
____1. agree ____2. disagree ____3. undecided

3. All a fireman needs to know is how to put out fires.
____1. agree ____2. disagree ____3. undecided

4. A person needs a college education to be an artist.
____1. agree ____2. disagree ____3. undecided

5. A barber or beautician needs a special license.
____1. agree ____2. disagree ____3. undecided

6. A secretary needs as much education as a teacher.
____1. agree ____2. disagree ____3. undecided

71. How much education does a person need to get each of the following jobs? (Check one answer for each occupation).

Job	Level of Education		
Carpenter	____College	____High School	____8th Grade
Plumber	____College	____High School	____8th Grade
X-Ray Technician	____College	____High School	____8th Grade
Teacher	____College	____High School	____8th Grade
Policeman	____College	____High School	____8th Grade

72. Which job requires the least training?
____1. nurse
____2. secretary
____3. maid

73. Which job requires the most training?
____1. carpenter
____2. plumber
____3. doctor

74. Which job requires the least training?
____1. teacher
____2. scientist
____3. laborer

75. Which job requires the least training?
____1. cashier
____2. grocery clerk
____3. insurance agent

76. Which job requires the most training?
____1. bus driver
____2. truck driver
____3. airline pilot

77. What job earns the least money?
____1. telephone operator
____2. secretary
____3. cook

78. Which usually earns the most money?
____1. tenant farmer
____2. tree surgeon
____3. veterinarian

79. Which usually earns the most money?
____1. nurse's aide
____2. dietitian
____3. dentist

80. Which job earns the most money?
____1. shoe salesman
____2. dime store clerk
____3. athletic coach

APPENDIX B

MOTHER SURVEY FORM

BASELINE QUESTIONNAIRE

AND

EXPERIMENTAL PHASE BEFORE AND AFTER TESTS

The questionnaires in this appendix appear as they were used in the study except for the addition of some phrases which name the variables being measured and the source of the scale or items. These phrases are printed in italics (script style).

BASELINE PHASE

MOTHER'S SURVEY OF OCCUPATIONAL AND EDUCATIONAL GOALS FOR CHILDREN

My name is ______________. I am representing the University of ___________. We are making a research study of how children in the 5th and 6th grades think about their future education and jobs, what they want to be when they grow up, and how much they know about different jobs. We would like to talk to you for a few minutes about how you feel about the future of your 5th and 6th grade child and ask you some questions about the family, the child, and current issues.

* * * * * * * * * * * * * * *

Name ______________________________ Date ____________________

Address or location ______________________________

Telephone number ______________

Name of child ______________________________

School ____________________ Grade __________ County ____________

ITEMS 1-6. OCCUPATIONAL ASPIRATIONS AND EXPECTATIONS FOR THE CHILD

(Talking with the child about future job)

1. Have you ever talked with *(name, survey child)* about the kind of job he (she) might have when he (she) grows up?

____

(Occupational Aspiration)

2. a. If you could choose any job, what kind of job would you most like *(name, survey child)* to have when he (she) grows up?

____

b. How likely do you think it is that *(name)* will be able to get that kind of job?

____1. very likely
____2. pretty likely
____3. not so likely
____4. not at all likely
____5. don't know

c. Why do you think that?

____

(Occupational Expectation)

3. What kind of job do you think *(name)* really will have when he (she) grows up?

____

p. 238 blank

MS, S-63, 2-'69, p. 1

(Talking with child about education)

4. Have you ever talked with ___(name)___ about how far he (she) should go in school?
____1. yes, a lot
____2. yes, a little
____3. no

(Educational Aspirations)

5. (HAND RESPONDENT CARD AND READ WITH HER.) If you had your choice, how far would you like ___(name)___ to go in school?
____1. 8th grade
____2. 1 or 2 years of high school
____3. go to a trade school instead of finishing high school
____4. finish high school
____5. finish high school and go to a trade school
____6. 1 or 2 years of college
____7. finish college

(Educational Expectations)

6. (HAND RESPONDENT CARD AND READ WITH HER.) How far do you think ___(name)___ really will go in school?
____1. 8th grade
____2. 1 or 2 years of high school
____3. go to a trade school instead of finishing high school
____4. finish high school
____5. finish high school and go to a trade school
____6. 1 or 2 years of college
____7. finish college

NOW, I WILL ASK YOU SOME QUESTIONS ABOUT SOME THINGS YOU DO.

ITEMS 7-15, *EXPOSURE TO LARGER SOCIETY*

7. Does anyone in your family take or read any daily newspapers regularly?
____1. yes (name or place published) ________________________________
____2. no

8. How often does someone in the family listen to a news program on the radio or TV?
____1. every day
____2. 2 or 3 times a week
____3. once a week
____4. seldom or never

9. About how many hours a day, on the average, do you watch TV (all kinds of programs)
____1. none
____2. no more than an hour
____3. 1 or 2 hours
____4. 3, 4, or 5 hours
____5. more than 5 hours

(IF ANSWER IS "DON'T KNOW, "ASK: How many programs did you watch yesterday?)

10. How much time does ___(name)___ watch TV on a school day?
____1. none
____2. no more than an hour
____3. 1 or 2 hours
____4. 3, 4, or 5 hours
____5. more than 5 hours

11. Do you belong to a church or attend regularly?
____1. belong and attend regularly
____2. belong but don't attend regularly
____3. don't belong but attend regularly
____4. don't belong and don't attend regularly

12. Are you a member of any clubs or organizations, such as the Homemakers Club, a social club, the PTA, a church related organization, etc.
____1. yes, one or more
____2. none

13. Are you registered to vote?
____1. yes
____2. no

14. Have you voted in any election or primary during the past two years?
____1. yes
____2. no

15. Do you happen to know who *(governor of state)* is?
____1. correctly identified the governor
____2. did not know

(HAND RESPONDENT CARD.) This card contains a list of statements that some people agree with and some don't. I'll read each of them over slowly with you, and you tell me if you agree or disagree with it. (DON'T SUGGEST UNDECIDED AS ANSWER.)

ITEMS 16, 18, 20, 22, & 24

(Srole -- Anomia Scale)

(Mother's Anomia or Alienation)

ITEMS 17, 19, 21, 23, 25, & 27

(Rosen -- Mother's Achievement Value Orientation)

16. Nowadays, a person has to live pretty much for today and let tomorrow take care of itself.
____1. agree ____2. disagree ____3. undecided

17. All a man should want out of life is steady work that is not too hard with enough pay to afford a nice car and home.
____. agree ____2. disagree ____3. undecided

18. In spite of what some people say, the life of the average person is getting worse, not better.
____1. agree ____2. disagree ____3. undecided

19. When a person is born, the success he is going to have is already in the cards, so he might just as well accept it and not fight against it.
____1. agree ____2. disagree ____3. undecided

20. These days a person doesn't really know whom he can count on.
____1. agree ____2. disagree ____3. undecided

21. The secret of happiness is not expecting too much out of life and being content with what comes your way.
____1. agree ____2. disagree ____3. undecided

22. It's hardly fair to bring children into the world with the way things look for the future.
____1. agree ____2. disagree ____3. undecided

23. Nothing is worth the sacrifice of moving away from one's parents.
____1. agree ____2. disagree ____3. undecided

24. There's little use in writing to public officials because often they aren't really interested in the problems of the average person.
____1. agree ____2. disagree ____3. undecided

25. A good son would try to live near his parents even if it means giving up a good job in another part of the country.
____1. agree ____2. disagree ____3. undecided

26. Planning only makes a person unhappy since your plans hardly ever work out anyway.
____1. agree ____2. disagree ____3. undecided

27. Nowadays with world conditions the way they are the wise person lives for today and lets tomorrow take care of itself.
____1. agree ____2. disagree ____3. undecided

28. People like me don't have much of a chance to be successful in life.
____1. agree ____2. disagree ____3. undecided

ITEM 29

(Kohn -- Parental Values Scale)

(Characteristics of children that mothers value)

29. (HAND RESPONDENT CARD AND READ WITH HER.) This card has sixteen statements. I am going to read all of them first and then you tell me the three that you think are the most important for a boy (girl) of ________'s age?
____1. that he (she) gets along well with other children
____2. that he (she) has good manners
____3. that he (she) tries hard to succeed
____4. that he (she) is neat and clean
____5. that he (she) is liked by adults
____6. that he (she) acts in a serious way
____7. that he (she) is able to defend himself (herself)
____8. that he (she) has self-control
____9. that he (she) is affectionate
____10. that he (she) is happy
____11. that he (she) obeys his (her) parents well
____12. that he (she) is honest
____13. that he (she) is dependable
____14. that he (she) is considerate of others
____15. that he (she) is interested in why and how things happen
____16. that he (she) is a good student

ITEMS 30-31

(Occupation of Parents)

30. a. What kind of work does your husband do? (GET AS SPECIFIC A DESCRIPTION AS POSSIBLE.)
____1. no husband
____2. unemployed (DESCRIBE USUAL WORK)

b. If the husband's (or respondent's) occupation is farmer, classify his farm operation as one of the following:
____1. "Gentleman farmer" or landowner who does not directly supervise his operations
____2. Large landowner who supervises some of his operations
____3. Farm operator with one or more regular paid laborers; farm manager
____4. Small farm owner-operator with no regular paid laborer
____5. Tenant operator with no regular paid laborer; hired foreman
____6. Sharecropper or regular paid laborer
____7. Migrant worker, day laborer or squatter

31. a. Do you have a job?
____1. no, housewife only
____2. yes. How many hours a week? ________
____3. usually work but unemployed now (DESCRIBE USUAL WORK BELOW)

b. What kind of work do you do? (GET SPECIFIC DESCRIPTION)

Items 32-33

(Residence Status of Parents)

32. a. Have you ever lived outside this county?
____1. yes ____2. no

b. If yes, have you lived: (Check all that apply)
____1. in an adjoining county?
____2. some place else in this state?
____3. in an adjoining state?
____4. in another southern state, not adjoining?
____5. some place else?

c. (OMIT FOR URBAN AREAS) Have you ever lived in a city (25,000 or more)?
____1. yes ____2. no

d. (OMIT FOR RURAL AREAS) Have you ever lived in the country or in a small town (less than 2,500)?
____1. yes ____2. no

33. a. Has you husband ever lived outside this county?
____0. no husband ____1. yes ____2. no

b. If yes, has he lived: (Check all that apply)
____1. in an adjoining county?
____2. some place else in this state?
____3. in an adjoining state?
____4. in another southern state, not adjoining?
____5. some place else?

c. (OMIT FOR URBAN AREAS) Has he ever lived in a city (25,000 or more)?
____1. yes ____2. no

d. (OMIT FOR RURAL AREAS) Has he ever lived in the country or in a small town (less than 2,500)?
____1. yes ____2. no

ITEMS 34-35

(Sources of Family Income)

34. What are the main sources of your family's income? Do you or your husband get any income from the following sources? (CHECK ALL THAT APPLY)
____1. salary or wages from employment or work (wife or husband)
____2. profits or fees from operating a farm, business of profession (wife or husband)
____3. rents from property you own or interest on savings or investments
____4. board money or contributions from others who live in the household
____5. money from children or relatives not in the household, including allotments from children in military service
____6. Social Security or other pensions
____7. government welfare (surplus foods, food stamps, Aid to Dependent Children, etc.)
____8. unemployment compensation
____9. gifts or private relief
____10.other (specify) ________________________________

ITEM 36

(Family composition)

36. Now I'd like to list all of the persons living in this household -- everyone who eats and sleeps here as a part of the family or household. (List first the mother and her husband, then the children of mother and/or husband in order of oldest to youngest, then other relatives, then anyone else. Include any persons who are considered household members who are temporarily away.)

	Age	Sex		In School?				Employed?		Occupation or Usual Work
		M	F	Yes	Grade	No	Last Grade	Yes	No	
Mother:										
Husband:										
Children:										

	Age	Sex		In School?				Employed?		Occupation or Usual Work
		M	F	Yes	Grade	No	Last Grade	Yes	No	
Others:										

EXPERIMENTAL PHASE
BEFORE/AFTER QUESTIONNAIRE

MOTHER'S SURVEY OF JOB KNOWLEDGE AND OCCUPATIONAL AND EDUCATIONAL GOALS FOR CHILDREN

My name is ________________. I am representing ____________________. We are making a research study of how children in the 7th and 8th grades think about their future education and jobs, what they want to be when they grow up, and how much they know about different jobs. We would like to talk to you for a few minutes about different jobs. We would like to talk to you for a few minutes about how you feel about the future of your 7th and 8th grade child and ask you some questions about the family, the child, and job information. You may remember that someone came to talk to you about two years ago concerning your child __________. Now that __________ is a little older, we want to talk to you again. Some of the questions are similar to those we asked before.

Name ____ Date ____________________

Address or location ____

Telephone Number ______________________

Name of Child ________________________________ Sex __________ Race __________

School ________________________________ Grade ________ County ______________

ITEM 1, HUSBAND'S OCCUPATION

NOW, I'D LIKE TO ASK ABOUT THE WORK THAT YOU AND YOUR HUSBAND DO.

1. What is the main kind of work that your husband does?
(Get as specific a description as possible.)

____

____1. no husband
____2. unemployed
____3. employed
____4. no usual work
____5. never employed
____6. disabled
____7. retired

ITEM 2, MOTHER'S OCCUPATION

2. a. Do you have a job?
____1. no, housewife only
____2. yes, how many hours a week
____3. usually work but unemployed now

Describe usual work below

b. What kind of work do you do? (Get specific description.)

____

ITEMS 3-8, OCCUPATIONAL ASPIRATIONS AND EXPECTATIONS FOR THE CHILD

(Talking with child about future job)

3. Have you ever talked with *(name, survey child)* about the kind of job he (she) might have when he (she) grows up?
____1. yes, a lot
____2. yes, a little
____3. no

(Occupational Aspiration)

4. a. If you could choose any job, what kind of job would you most like *(name, survey child)* to have when he (she) grows up?

____

b. How likely do you think it is that *(name, survey child)* will be able to get that kind of job?
____1. very likely
____2. pretty likely
____3. not so likely
____4. not at all likely
____5. don't know

c. Why do you think that?

____
____0. no response
____1. ability
____2. motivation
____3. motivational contingency
____4. financial or economic
____5. financial contingency
____6. educational reasons or contingency
____7. encouragement of others
____8. family or general home environment
____9. discrimination

(Occupational expectation)

5. What kind of job do you think *(name)* really will have when he (she) grows up?

____

(Talking with child about education)

6. Have you ever talked with *(name)* about how far he (she) should go in school?
____1. yes, a lot
____2. yes, a little
____3. no

(Educational Aspirations)

7. If you had your choice, how far would you like *(name)* to go in school?
____1. 8th grade
____2. 1 or 2 years of high school
____3. go to a trade school instead of finishing school
____4. finish high school
____5. finish high school and go to trade school
____6. 1 or 2 years of college
____7. finish college

(Educational Expectations)

8. How far do you think (*name*) really will go in school?

____1. 8th grade
____2. 1 or 2 years of high school
____3. go to a trade school instead of finishing high school
____4. finish high school
____5. finish high school and go to trade school
____6. 1 or 2 years of college
____7. finish college

I'M GOING TO READ SOME STATEMENTS TO YOU. WHEN I READ EACH ONE, PLEASE TELL ME WHETHER YOU AGREE OR DISAGREE.

9. In order to help a young person choose a job for the future, parents should plan some time to take their children to see people working in various jobs.
____1. agree ____2. disagree ____3. undecided

10. Parents should not try to help their children make a decision about a job for the future.
____1. agree ____2. disagree ____3. undecided

11. A young person should start thinking about a job before he is almost through high school.
____1. agree ____2. disagree ____3. undecided

12. A person should find a satisfying job rather than a job that just pays a lot of money.
____1. agree ____2. disagree ____3. undecided

13. The 7th or 8th grade is too early to start thinking about one's life work.
____1. agree ____2. disagree ____3. undecided

14. Whether or not a person gets a good job depends very little on luck.
____1. agree ____2. disagree ____3. undecided

15. Most people can learn all they need to know about their jobs without finishing high school.
____1. agree ____2. disagree ____3. undecided

16. Nowadays people have to get their jobs on their own because there is no one to help them.
____1. agree ____2. disagree ____3. undecided

17. Having self-confidence gives a person a better chance in life.
____1. agree ____2. disagree ____3. undecided

18. When it comes to choosing a job, the person finally has to make up his own mind.
____1. agree ____2. disagree ____3. undecided

19. A person's chances of getting a good job become less if he stays in school.
____1. agree ____2. disagree ____3. undecided

20. Since nobody knows what things will be like when he finishes school, it doesn't do any good to plan for his working life.
____1. agree ____2. disagree ____3. undecided

21. If you expect more from a child, he'll probably do more.
____1. agree ____2. disagree ____3. undecided

22. It is easier for a young person to take a new job if he has learned to decide things for himself.
____1. agree ____2. disagree ____3. undecided

23. A person may have better jobs to choose from if he is willing to move.
____1. agree ____2. disagree ____3. undecided

24. Mothers cannot help their children choose goals for their lives.
____1. agree ____2. disagree ____3. undecided

25. If someone has faith in you, you're more likely to have a good feeling about yourself.
____1. agree ____2. disagree ____3. undecided

26. Children need to know that their parents care about what they become when they grow up.
____1. agree ____2. disagree ____3. undecided

27. One of the first things in getting a good job is wanting to get a good one.
____1. agree ____2. disagree ____3. undecided

28. It is important for a 7th or 8th grader to work hard in school now if he wants to get vocational training later.
____1. agree ____2. disagree ____3. undecided

NOW I AM GOING TO ASK YOU SOME QUESTIONS ABOUT JOBS, SCHOOLING AND CHOICES YOUNG PEOPLE MAY HAVE.

29. Sometimes a person can't get into the job he wants because he didn't plan far enough ahead.
____1. agree ____2. disagree ____3. undecided

30. Even though the schools give help, every family should do what it can to help its children get ready for later life.
____1. agree ____2. disagree ____3. undecided

31. There is no need to prepare for a job because something always turns up sooner or later.
____1. agree ____2. disagree ____3. undecided

32. You can learn about jobs by talking to people you know, but you have to make your own plans.
____1. agree ____2. disagree ____3. undecided

33. A child may think a lot about what he wants to be, but he really doesn't have much choice.
____1. agree ____2. disagree ____3. undecided

34. People who finish high school usually make more money later than those who do not finish high school.
____1. agree ____2. disagree ____3. undecided

35. A person is foolish to keep going to school if he can get a job now.
____1. agree ____2. disagree ____3. undecided

36. A high school education is worth the time and effort it requires.
____1. agree ____2. disagree ____3. undecided

37. Education is no help in getting a job today.
____1. agree ____2. disagree ____3. undecided

38. A child's home life helps to make him into the kind of person he'll be when he is grown.
____1. agree ____2. disagree ____3. undecided

39. Even if a young person admires someone and knows something about him, he will not try to be like him.
____1. agree ____2. disagree ____3. undecided

40. How a person feels about himself depends a lot on how he has been treated by his parents.
____1. agree ____2. disagree ____3. undecided

THE NEXT QUESTIONS ARE STATEMENTS THAT SOME PEOPLE AGREE WITH AND SOME DON'T. I'LL READ EACH OF THEM OVER SLOWLY, AND YOU TELL ME IF YOU AGREE OR DISAGREE WITH IT. (DON'T SUGGEST UNDECIDED AS AN ANSWER).

ITEMS 41, 43, 45, 47, & 49

(Srole -- Anomia Scale)

(Mothers Anomia or Alienation)

ITEMS 42, 44, 46, 48, 50, 51, & 52

(Rosen -- Mother's Achievement Value Orientation)

41. Nowadays, a person has to live pretty much for today and let tomorrow take care of itself.
____1. agree ____2. disagree ____3. undecided

42. All a man should want out of life is steady work that is not too hard and enough pay to afford a nice car and home.
____1. agree ____2. disagree ____3. undecided

43. In spite of what some people say, the life of the average person is getting worse, not better.
____1. agree ____2. disagree ____3. undecided

44. When a person is born, the success he is going to have is already in the cards, so he might just as well accept it and not fight against it.
____1. agree ____2. disagree ____3. undecided

45. These days a person doesn't really know whom he can count on.
____1. agree ____2. disagree ____3. undecided

46. The secret of happiness is not expecting too much out of life and being content with what comes your way.
____1. agree ____2. disagree ____3. undecided

47. It's hardly fair to bring children into the world with the way things look for the future.
____1. agree ____2. disagree ____3. undecided

48. Nothing is worth the sacrifice of moving away from one's parents.
____1. agree ____2. disagree ____3. undecided

49. There's little use in writing to public officials because often they aren't really interested in the problems of the average person.
____1. agree ____2. disagree ____3. undecided

50. A good son would try to live near his parents even if it means giving up a good job in another part of the country.
____1. agree ____2. disagree ____3. undecided

51. Planning only makes a person unhappy since your plans hardly ever work out anyway.
____1. agree ____2. disagree ____3. undecided

52. Nowadays with world conditions the way they are, the wise person lives for today and lets tomorrow take care of itself.
____1. agree ____2. disagree ____3. undecided

ITEMS 53-64

(Job Information/Knowledge)

53. NOW HERE ARE SOME QUESTIONS ON A DIFFERENT SUBJECT. PLEASE TELL ME WHETHER YOU AGREE OR DISAGREE WITH EACH ONE.

1. A mechanic makes more money than a pulp wood driver.
____1. agree ____2. disagree ____3. undecided

2. A waitress usually makes more money than a nurse.
____1. agree ____2. disagree ____3. undecided

3. A carpenter usually makes less money than a laborer.
____1. agree ____2. disagree ____3. undecided

4. A teacher usually makes less money than a secretary.
____1. agree ____2. disagree ____3. undecided

5. A brick layer and a carpenter usually make about the same amount.
____1. agree ____2. disagree ____3. undecided

6. Telephone operators usually make more money than maids.
____1. agree ____2. disagree ____3. undecided

54. THE NEXT QUESTIONS ARE ABOUT JOBS AND EDUCATION OR TRAINING. RESPOND WHETHER YOU AGREE OR DISAGREE.

1. A nurse has to go to school as long as a doctor.
____1. agree ____2. disagree ____3. undecided

2. There is need for more skilled auto mechanics than we have in this country right now.
____1. agree ____2. disagree ____3. undecided

3. All a fireman needs to know is how to put out fires.
____1. agree ____2. disagree ____3. undecided

4. A person needs a college education to be an artist.
____1. agree ____2. disagree ____3. undecided

5. A barber or beautician needs a special license.
____1. agree ____2. disagree ____3. undecided

6. A secretary needs as much education as a teacher.
____1. agree ____2. disagree ____3. undecided

55. Which job requires the most training?
____1. nurse
____2. secretary
____3. maid

56. Which job requires the most training?
____1. carpenter
____2. plumber
____3. doctor

57. Which job requires the least training?
____1. teacher
____2. scientist
____3. laborer

58. Which job requires the least training?
____1. cashier
____2. grocery clerk
____3. insurance agent

59. Which job requires the most training?
____1. bus driver
____2. truck driver
____3. airline pilot

60. Which job earns the least money?
____1. telephone operator
____2. secretary
____3. cook

61. Which usually earns the most money?
____1. tenant farmer
____2. tree surgeon
____3. veterinarian

62. Which usually earns the most money?
____1. nurse's aide
____2. dietitian
____3. dentist

63. Which job earns the most money?
____1. shoe salesman
____2. dime store clerk
____3. athletic coach

64. How much education does a person need to get each of the following jobs?
(Check one answer for each occupation.)

Job	Level of Education		
Carpenter	____ College	____ High School	____ 8th Grade
Plumber	____ College	____ High School	____ 8th Grade
Policeman	____ College	____ High School	____ 8th Grade
X-Ray Technician	____ College	____ High School	____ 8th Grade
Teacher	____ College	____ High School	____ 8th Grade

ITEM 65 was presented in the Before Test only.

GUIDE FOR LEADER

65. Let's talk about ______________. What is he (she) like?

Identify his special characteristics, especially his interests and abilities. As I mention different characteristics, you tell me which words describe your child.

1. Appearance

a. What is the best thing about his looks?

____

b. Circle characteristics that he has:

Tall	Neat	Short	Messy
Thin	Attractive	Fat	Unattractive

Others (please list):

____

____

2. Personality (check columns that describe him)

	Very much	Fairly	Not Very
a. friendly	____	____	____
b. generous	____	____	____
c. honest	____	____	____
d. lazy	____	____	____
e. shy	____	____	____
f. others (please list):			
______________	____	____	____
______________	____	____	____

3. Abilities (check columns that describe him)

	Good	Fair	Poor
a. artistic	____	____	____
b. gets along with people	____	____	____
c. music	____	____	____
d. school	____	____	____
e. sports	____	____	____
f. others (please list):			
______________	____	____	____
______________	____	____	____

4. Interests (check columns that describe him)

	Large Amount	Average Amount	Dislikes
a. outdoor activities	____	____	____
b. watching games	____	____	____
c. reading	____	____	____
d. public speaking	____	____	____
e. school	____	____	____
f. church	____	____	____

5. Independence
 ____1. very independent
 ____2. average
 ____3. waits for others to decide

6. Knowledge about world of work
 ____1. knows about a lot of different jobs
 ____2. about average in knowing about work
 ____3. hasn't thought about work

7. Faith in himself and his abilities
 ____1. likes to start new projects
 ____2. refuses to do things he has done before

Now in view of what we have just discussed about ____________________, what job do you think he (she) would be best suited for?

APPENDIX C

SUMMARY INFORMATION ON VARIABLES
BASELINE AND EXPERIMENTAL PHASES

SUMMARY INFORMATION ON DIFFERENCE VARIABLES
EXPERIMENTAL PHASE

TABLE 1

SUMMARY INFORMATION ON VARIABLES

BASELINE PHASE

Acronym	Brief Description	Item Number in Mother's (M) or Child's (C) Questionnaires Baseline Phase	Scoring
OCC	Mean of Child's aspired and expected job plans, based on NORC-Transform scores (Reiss, pp. 263-275)	C - 9,11	Mean of total NORC scores
ED	Mean of Child's aspired and expected educational plans	C - 13,14	Mean of total
AC	Child's Academic Motivation (includes "liking" school)	C - 19,20,21,22,23,24,31,32, 37,40	Total score (Adjusted so high score is high motivation)
MED	Mean of Mother's aspiration and expectations for child's education	M - 5,6	Mean of total
MOC	Mean of Mother's aspirations and expectations for child's job plans based on NORC-Transform scores (Reiss, pp. 263-275)	M - 2a,3	Mean of total NORC scores
SEL	Child's Self-Concept Score (modified Lipsitt)	C - 95,96,97,98,99,100,101,102, 103,104,105,106,107,108,109, 110,111,112,113,114,115,116	Scored so total represents high self concept. (No. 98 omitted in scoring)

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TABLE 1

SUMMARY INFORMATION ON VARIABLES

BASELINE PHASE

(Continued) 2

Acronym	Brief Description	Item Number in Mother's (M) or Child's (C) Questionnaires Baseline Phase	Scoring
FATK	Child has talked with father about future job and/or education	C - 11,15	Score o if not talked 1 if talked about one 2 if talked about both
MOTK	Child has talked with mother about future job and/or education	C - 11,15	Score o if not talked 1 if talked about one 2 if talked about both
COM	Child's perception of mother's degree of communication and control of decision making	C - 45,46,47,48,49	
PU	Child's perception of Mother's punishing behavior as measured by the Bronfenbrenner Parent Behavior Questionnaire	C - 75,77,78,79,82,84,85, 86,89,91,92,93	Sum of scores (Adjusted so high score means high punishing)
DM	Child's perception of Mother's demanding behavior as measured by the Bronfenbrenner Parent Behavior Questionnaire	C - 51,52,53,55,56,59,60, 61,63,64,67,68,71,72	Sum of scores (Adjusted so high score means high demanding)
LV	Child's perception of Mother's loving behavior as measured by the Bronfenbrenner Parent Behavior Questionnaire	C - 50,54,57,58,62,65,66,70, 73,74,76,80,81,83,87,88, 90,94	Sum of scores (Adjusted so high score means high loving)
CHA	"Mother wants her child to have character" - based on three choices from 16 of Kohn's characteristics	M - 29 (parts 3,7,8,12,13)	Preponderance of choices
OUT	"Mother emphasizes outgoing child"- based on three choices from Kohn's list of 16 characteristics	M - 29 (parts 1,9,10,14,15)	Preponderance of choices

TABLE 1

SUMMARY INFORMATION ON VARIABLES
BASELINE PHASE

(Continued) 3

Acronym	Brief Description	Item Number in Mother's (M) or Child's (C) Questionnaires Baseline Phase	Scoring
FST	Child is oldest in household or only child	M - 36	Score 1: First born or only 0: Not first born
IQ	Otis-Lennon DIQ score	C - DIQ score from Otis booklet	DIQ score
ACV	Mother's score on achievement values	M - 17,19,21,23,25,26,27,28	Total score (weighted)
ANO	Mother's anomie score (Srole items)	M - 16,18,20,22,24	If 3 or more in anomie direction - 1 If 2 or less - 0
FBK	Family background -- combination of:		
	Father's occupation or if no father, then Mother's	M - 30	(Duncan) - NORC scores
		31	(Duncan) - NORC scores
	Mother's education	36	Years of schooling
	Father's education	36	Years of schooling
	Mother's "social participation"	7,8,11,12,14,15	Combination
HOZ	Number of persons in household	M - 36	
NOH	No husband in the home	M - 30a	Husband - scored 0 No husband - scored 1
WEL	Household gets income from welfare source	M - 34,35,36	Combination
MOG	Mother's age	M - 36	Age

TABLE 1

SUMMARY INFORMATION ON VARIABLES
EXPERIMENTAL PHASE

(Continued) 4

Acronym	Brief Description	Item Number in Mother's (M) or Child's (C) Before and After* Questionnaires Experimental Phase	Scoring
EXP	Group meeting attendance	- - - -	3 -- attended 0 -- did not attend
FAMDUN	Family occupation Father's occupation or the mother's if no father	- - - -	Duncan -- NORC scores
MUDB* MUDA*	Mother's aspired plus expected occupational attainment for the child before (B) and after (A) the group meetings	M - 4a,5	Mean of total NORC scores
MDDB MDDA	Mother's aspired minus expected occupational attainment for the child before and after the group meetings	M - 4a,5	Mean of total NORC scores
MEDB MEDA	Mother's aspired plus expected educational attainment for the child before and after the group meetings	M - 7,8	
MDEB MDEA	Mother's aspired minus expected educational attainment for the child before and after the group meetings	M - 7,8	
MINFB MINFA	Mother's job information score before and after the group meetings	53(parts 1-6); 54(parts 1-6); 55;56;57;58;59;60;61;62;63; 64(parts 1-5)	Total number of correct responses (all correct yields a score of 26)

*The last letter of each acronym, either B or A, indicates the responses to the questionnaires given before (B) and after (A) the group meetings.

TABLE 1

SUMMARY INFORMATION ON VARIABLES
EXPERIMENTAL PHASE

(Continued) 5

Acronym	Brief Description	Item Number in Mother's (M) or Child's (C) Before and After* Questionnaires Experimental Phase	Scoring
MBB MBA	Mother talks with child about jobs before and after the mother attended the group meetings	M - 3	Scored 1 = no; 2 = yes, a little; 3 - yes, a lot
JBB JBA	Child's job thought before and after the mother attended the group meetings	C - 8	Higher rating indicates more job thought
DUNCB DUNCA	Child's aspired plus expected occupational attainment before and after the mother attended the group meetings	C - 9a,10	Duncan-NORC scores
DDB DDA	Child's aspired minus expected occupational attainment before and after the mother attended the group meetings	C - 9a,10	Duncan-NORC scores
DEDB DEDA	Child's aspired plus expected educational attainment before and after the mother attended the group meetings	C - 11,12	
EDB EDA	Child's aspired minus expected educational attainment before and after the mother attended the group meetings	C - 11,12	
ACB ACA	Child's academic motivation before and after the mothers attended the group meetings	C - 13-18	

*Last letter of acronym, B or A, indicates responses to before or after questionnaire

TABLE 1

SUMMARY INFORMATION ON VARIABLES
EXPERIMENTAL PHASE

(Continued) 6

Acronym	Brief Description	Item Number in Mother's (M) or Child's (C) Before and After* Questionnaires Experimental Phase	Scoring
SELB SELA	Child's self concept before and after the mother attended the group meetings	C - 47-68	Scored so total represents high self concept
CINFB CINFA	Child's information before and after the mother attended the group meetings	C - 69 (parts 1-6); 70 (parts 1-6); 71 (parts 1-5); 72-80	Total of correct responses

*Last letter of acronym, B or A, indicates responses to before or after questionnaire

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TABLE 1

SUMMARY INFORMATION ON DIFFERENCE VARIABLES
EXPERIMENTAL PHASE

(Continued) 7

Acronym	Brief Description	Composition of difference variable
MUDD*	Mother's aspired plus expected occupational attainment after test score for the child minus the before test score	MUDA - MUDB
MDDD	Mother's aspired minus expected occupational attainment after test score for the child minus the before test score	MDDA - MDDB
MEDD	Mother's aspired plus expected educational attainment score for the child on the after test minus the before test score	MEDA - MEDB
MDED	Mother's aspired minus expected educational attainment score for the child on the after test minus the before test score	MDEA - MDEB
MINFD	Mother's information score on the after test minus the before test score	MINFA - MINFB
JBD	Child's job thought score on the after test minus the before test score	JBA - JBD
DUNCD	Child's aspired plus expected occupational attainment score on the after test minus the before test score	DUNCA - DUNCB (difference in the child's overall level).
DDD	Child's aspired minus expected occupational attainment score on the after test minus the before test score	DDA - DDB (gap for child)
EDD	Child's aspired minus expected educational attainment score on the after test minus the before test score	EDA - EDB
DEDD	Child's aspired plus expected educational attainment score on the after test minus the before test score	DEDA - DEDB

*Last letter of acronym, D, indicates that it is a difference variable

TABLE 1

SUMMARY INFORMATION ON DIFFERENCE VARIABLES EXPERIMENTAL PHASE

(Continued) 8

Acronym	Brief Description	Composition of difference variables
ACD	Child's academic motivation score on the after test minus the before test score	ACA - ACB
SELD	Child's self concept score on the after test minus the before test score	SELA - SELB
CINFD	Child's information score on the after test minus the before test score	CINFA - CINFB
MBD	Score on item about mother talking with child about jobs on the after test minus the before test score	MBA - MBB

APPENDIX D

RESEARCH PROCEDURES MANUAL FOR BASELINE PHASE

RESEARCH PROCEDURES MANUAL

1969 Baseline Study

Instructions and Suggestions for Administration

Selection of Location and Sample

As agreed upon by the committee the subcultures which each state is to study as its minimum responsibility are as follows:

Rural White Appalachian
  Kentucky, North Carolina, Tennessee

Urban Negro
  Alabama, Virginia

Rural Negro
  South Carolina, Mississippi

The sample in each state for each subculture is to include 200 fifth and sixth grade students (boys and girls) in at least 4 and not more than 10 schools, preferably in two counties or school districts. (Alabama may take fewer students but will have at least 100 student-mother pairs of schedules.) The students should be approximately evenly divided between fifth and sixth graders and normally entire classrooms will be given the students' questionnaire and I.Q. tests, even if some students are to be eliminated before the mothers are interviewed. Where white and Negro students are in the same classrooms, sufficient additional students will be included to allow for the elimination of the race not needed in the particular state and still leave the needed 200 of the race desired.

In selecting schools the requirements of the experimental phase of the study should be kept in mind. Of the 200 students surveyed it is hoped that the mothers of at least 150 will be interviewed; it is from this group of mothers that the members of the experimental and control groups will be chosen. Since the exact design for the experimental phase is not yet determined, it seems desirable to have at least 50 students per school in order to leave open several options as to how the experiment will be set up. In selecting the counties the availability of Extension personnel and teachers qualified for and interested in participating in the experimental phase should be considered.

Whereas the sample will not be a proportional representation of any known universe in the statistical sense, every effort should be made to have it as homogeneous as possible and as "typical," as can be found, of the particular low-income subcultural group assigned each state. Ability-grouped classes should be avoided unless it is clear that combined with other classes in the sample from the same school they constitute a normally distributed group for the area. The states responsible for each subculture should confer among themselves to see that they are taking their samples from relatively similar situations. For example, the urban Negro sample in each state should preferably come from predominatly Negro schools or else from well-integrated schools in each state. The same should be true of the rural Negro samples.

Suggested guidelines for selecting the samples from the three subcultures and some general guidelines are outlined separately. The word "eliminate" as used below may mean "omit" after the survey administration.

Rural Appalachia

1. Avoid counties or areas having a town of 10,000 or more, or at least areas immediately adjacent to such towns. Avoid areas closer than 35 miles to large cities.
2. Avoid heavily industrialized areas where most people work in factories or in towns and cities.
3. Give preference to areas where small farms still occupy a substantial number of people. Avoid areas that are very largely dependent on mining, or at least do not mix all-farming and all-mining areas -- concentrate on one or the other. But mixed-economy areas may be used if they are frequent in the state. The several states responsible for this subculture should confer concerning the characteristics of their sample areas to insure as much similarity as possible.
4. Avoid or eliminate children living within the urban areas of towns of 2500 or more.
5. Avoid areas or schools (if any) having substantial numbers of Negroes.

Rural Negro

1. Avoid counties or areas having a town of 10,000 or more or at least areas immediately adjacent to such towns. Avoid areas closer than 35 miles to large cities.
2. Avoid heavily industrialized areas where most people work in factories, in towns and cities. (However, if few Negroes work in such situations, this may not be an important criterion.)

3. Give preference to areas where farming, fishing, or forest industries still occupy a substantial number of people.

4. Avoid or eliminate children living within the urban areas of towns of 2500 or more.

5. If possible, choose schools where most pupils are Negro. Eliminate white pupils after schedule administration.

Urban Negro

1. Choose schools in cities of 40,000 or more, with 10,000 or more Negro population.

2. Choose predominantly Negro schools if other criteria are met.

3. Avoid schools which have significant numbers of rural pupils.

General Guidelines

1. Eliminate children with major physical disabilities, serious chronic diseases, or serious mental handicaps.

2. Children whose background or living situation obviously and clearly makes them extremely unrepresentative of the subculture and area being studied should be eliminated, provided not more than 5% of a given school's sample is so eliminated. Ask the teacher whether there are any students who should be so eliminated. Examples would be children of high status professional parents who both are college graduates or beyond, wealthy families, etc.

3. Foster children wards of the state in boarding homes should be eliminated, as should other children not living with their mother, stepmother, or adopted mother.

4. Any state may add additional samples or numbers over and above their minimum assignment. States may also add questions for their own purposes if this does not distort or change the meaning of the standard sections.

Student Survey Form and Otis-Lennon Test

General Guidelines. It is hoped that most of the administration can be carried out in February or soon thereafter. It is desirable and assumed that all student survey forms will be completed by the children in their schools, with a member of the research team handling the administration. If any states find it impossible to secure permission for administration in the schools, the chairman will set up a subcommittee to advise with that state and approve alternative guidelines as to how the study may be completed.

The following are suggested guidelines for making arrangements with schools:

1. Select school districts and schools according to suggested criteria and with advice of school and Extension personnel. It is desirable to make personal visits to areas under consideration before final selection. Keep the requirements of the experimental phase in mind in selection of schools.

2. Secure permission from the superintendent and/or board of education of school districts involved.

3. Contact the principal, explain purposes and what is involved, and make arrangements for specific time and place for administration. Avoid days when large numbers of pupils are absent.

4. Contact the teacher and explain what is involved and what her role and the researcher's will be.

Use of Results. The giving of Otis-Lennon test scores or results to school personnel is discouraged; whenever it is necessary to do so to gain cooperation it should be done with extreme caution, as the scores are easily misinterpreted or misused. It is preferable when results are given that they be presented as ranges and percentage distributions rather than individual scores. If it seems necessary to report individual results, the stanine score (as explained on pp. 15 and 16 of the Otis-Lennon Manual for Administration) is to be used rather than the DIQ. Scores given to school personnel should be accompanied by explanatory material based on or reproduced from the Manual for Administration, and caution in use should be stressed. Preferably, scores should be sent to school principals rather than directly to classroom teachers.

No information or results will be given from the Student Survey Forms. If possible, avoid leaving any of the three schedules -- the Otis, the Student Survey Form, or the Mother's Schedule with the teachers or principals.

Administration Procedures

1. It may be helpful to prepare for each student an envelope containing an Otis booklet, an SSF, and two pencils. Write the student's name on all test materials.

2. Before administration enter as much of the cover page information as possible from school records. Have the students check it at the beginning of the testing sessions.

3. The Otis and the SSF are to be administered on the same day with a break between them, the type of break to be determined according to the school schedule. A random method (coin flip) should be used to determine the order of the Otis and SSF the first time, and the order should be alternated thereafter.

4. It is suggested that both measures be administered by two-person teams, with one person reading and one answering individual questions, keeping down student collaboration, and making sure that students are staying together and using proper answering procedures. Two classes may be combined for convenience in administration if instructions can still be easily heard and sufficient personnel are present to assist students.

5. Though individual situations will determine the specific relationship, the role of the teacher should be minimized except perhaps with regard to discipline. It is strongly recommended that the teacher be asked to remain in the background and not participate in the administration. The teacher may leave the room or stay in the back. A decision should be reached with the teacher as to what the students will do when the class finishes.

6. Normally, entire classes will complete the instruments even if some are to be eliminated later. It is not desirable to single out just the Negro students or the white students, even if only one group is wanted. If the group includes Negro and white students, some way of distinguishing the questionnaires of each without asking the students will have to be worked out. In no case should the teacher be allowed to select students or excuse some from participating, or the pupils be given the option of completing it or not, as this would bias the sample.

7. Before or after the administration, but not in the presence of the students, ascertain from the teacher and/or principal whether any students should be eliminated from the rest of the study for reasons discussed earlier.

8. Communication between students or looking on others' papers should be minimized by spreading desks or pupils to the extent possible, by separating friends or cliques if necessary, and by quietly asking those seen doing so to stop.

9. Introduce yourselves as soon as you are given the floor in the classroom. The following is suggested:

   "Good morning. We're from the University of ____________ in ______________. My name is ____________ and this is ____________. This morning we're going to ask you some questions about yourself, your home and your parents, and your plans for the future. Then in the afternoon we will give you a test to see how well you can do different kinds of problems." (or vice versa)

Specific Instructions for Student Survey Form

1. Before beginning classroom administration, fill in items 1-5 from school records.

2. After introducing yourself, read items 1-5 with the students and ask them to check the information and make corrections or supply missing information. In making corrections, ask them not to erase but to X-out and put in the correct information.

3. (Rural Samples only) Ask the students to use the second line under address (#4) to describe how to get to their house. For example:

   "On the second line after #4 -- address -- tell how to find your house. Tell what it is near -- a certain church, school, store, crossroads, or some other place that is easy to find and that everyone knows about."

4. Read all questions and response categories except where the categories are the same for a long list of questions. In that case read the responses for the first three or four questions, stop until midway through the sequence, read the next two or more response categories, and then again near the end of the sequence or when a new mode of response begins. This applies to questions 50-74, 75-94, 95-116.

5. Encourage the students to raise their hands and ask questions about anything that is not understood.

6. Try to adjust the pace so that the quicker students do not become bored, but the slower ones have ample time. It may be helpful to have the students look up as they finish each item. Ask them to wait after finishing a page until you say, "Now turn to the next page."

7. Always read the introduction to each section of questions with the students.

8. Question 9a, 10. It may be desirable to repeat these questions while the students think. A permissible "probe" or synonym is "What kind of work would you really like to do?" What kind of work do you think you really will do?"

Specific Instructions for Otis-Lennon

1. Fill in cover-sheet information prior to class administration and have the students check it when the forms are distributed. If this is not feasible, have the students fill in all information except that on age and date of birth. Since many students may not know their birth date it will save a great deal of time to have the teacher supply birth dates from class records while the students are taking the test.

2. Directions for administration are found on pp. 7-9 of the Manual for Administration. The administrator should familiarize himself with these and follow the "General Instructions for Administration" (p.7) and the "Specific Directions When Answers Are Marked in the Test Book" (p. 9).

3. As many students may have taken speed-oriented tests in the past, it should be stressed that 40 minutes will be ample time, and that since scoring is based on the number of correct answers, there is no need to hurry.

4. Demonstrate the procedure for marking answers both by an example on the board and by holding up a booklet and pointing out the answer column. After the test has begun, go around the room to check for proper answering procedure.

5. It may be necessary to remind the students to "Go on to the next page" after they have finished Page 3.

Interviewing the Mothers

General Guidelines

Students not living with their mother or stepmother (Question 7 on Student Survey Form) are to be eliminated from the sample. Where there are two children in the sample with the same mother, choose by some random method (coin flip) the child about whom to interview the mother. Eliminate from the study the data of the remaining child or children of this mother. A few other children may be eliminated as quite unrepresentative of the subculture, on the basis of information from the teacher or principal about the parents' income, occupation, or level of living (See above.) Children who leave most of the SSF blank will also have to be eliminated.

Except for eliminations of the above types it is assumed that all mothers will be interviewed, and it is estimated that data will be obtained for about 150 mother-child pairs or more in each state. It will not be necessary to secure replacements for refusals or lost interviews unless the number should fall substantially lower than 150, in which case please contact the committee chairman and/or statistician. If it appears that the number of mother interviews that will be obtainable will be considerably more than 150 and funds are not available to interview them all, contact the committee statistician and work out a method of randomly eliminating some. Do not just leave off the most difficult to contact, the most isolated, or the least cooperative, etc.

Specific Guidelines

1. It is assumed that mothers will generally be interviewed individually in their homes, though there is no objection to interviewing in a central location if this can be arranged without inconvenience to the respondents or damaging rapport. Privacy is desirable, if possible, and it is highly preferable that the child about whom you are interviewing not be present.

2. When the mother respondents are Negro, it is desirable to use Negro interviewers. In any case, the race of the interviewer should be known to those researchers processing and analyzing the data.

3. It will probably be helpful to refer to the questionnaire filled out earlier by the children at school. In most cases the parents are likely to have a favorable image of the school and want to cooperate. Interviewers should also specify their connection with the university making the study.

4. Read aloud to the respondent all questions and responses except where otherwise instructed. Don't accept a "don't know" or "undecided" answer without first repeating the question or asking a general probe question. Probe for a pertinent response on all open-ended questions.

5. Unless otherwise indicated, the blanks left in many of the questions mean that the interviewer is to read the child's name into the question at this point.

The "Interviewing Procedures Manual" includes additional directions for administering surveys and conducting interviews.

Instructions for Specific Questions

Cover-sheet - If the address, location, or telephone number are not complete or correct as obtained from the school and child and copied on this schedule, add information that will make future contacts easier (what the house is near, local name of the road, etc., in rural areas).

Q. 2a & 3 - Try hard to get a specific job or jobs in response to these questions. Don't suggest specific jobs, but ask general probing questions or repeat the question as a probe.

Q. 5, 6 - It is important that the respondent be given the card and the response check-list be read for these questions in order to structure the response to include the trade or vocational school possibilities.

Q. 7 - Name or place published. This information is needed as a check on whether the respondent is really answering for daily papers.

Q. 9 - If the respondent has trouble estimating her daily average TV viewing, ask the probe question provided, "How many programs did you watch yesterday?" and figure the estimate on yesterday's viewing by adding the time of each program. If yesterday was Sunday or Saturday, it is probably best to take the last "typical" day. You need not record anything but the check-list answer arrived at by this procedure.

Q. 15 - Insert the name of the governor of your state in the blank as you read this question and check whether the respondent correctly identified him or not.

Q. 16 - 28 - Do not read "undecided" as a response, but record it if the respondent seems truly undecided, after you have repeated the question as a probe. (Unlike the schedule, the cards to hand the respondent will not have "undecided" on them.)

Q. 30 - This information will be used to derive a socioeconomic index score. The description should include both the name or general type of job and specific position or what the person does, such as foreman or manager. It should also indicate whether or not the person is self-employed. Get as much detail as possible on duties and level of responsibility -- not "works in Smith Factory" but "operates sewing machine in Smith Factory," "sweeps floors and fires furnace," "is office manager," "is shift foreman," "helps keep books," etc.

Q. 32 - 33 - In parts c & d, the figures 25,000 (twenty-five thousand) and 2,500 (twenty-five hundred) are correct -- the range in between has intentionally been excluded from analysis. Thus the person now living in a city (25,000 or more) who has previously only lived in a town of 10,000 would receive a "no" check in 32 or 33d.

Q. 35 - Where one or more persons other than the respondent and her husband share the costs of the household, or buy food or pay rent, consider this "board" or "contributions," even if one of these persons is really the head of the household or the main breadwinner.

APPENDIX E

INTERVIEWING PROCEDURES MANUAL
FOR
BASELINE PHASE

Influences on Occupational Goals of Young People
in
Three Subcultures in the South

Regional Project S-63
February 1969

The general outline of this interviewer's manual was adapted from similar manuals used in Projects S-48 and S-48(Revised) conducted by the Southern Regional Technical Committee. Procedures pertinent for Project S-63 were outlined by the current technical committee. Using this manual each state prepared one suitable to the sample being studied in selected counties.

I. Introduction

Before presenting the details of this project, we would like to encourage you as an interviewer to become thoroughly familiar with its general purposes. You may be asked to explain them many times before the interviewing is completed. The better informed you are in this respect, the easier, more interesting and enjoyable your work will be and the more pride you will have in being an important part of it. If for any reason the intent or purposes of the project or any part of the manual are not clear to you, let us know immediately so we can explain further. We want you to work comfortably and efficiently. The project cannot possibly be a success if we do not understand each other's problems.

II. General Purposes

Concern with what influences young people to make the educational and vocational choices they do is intensified by the fact that increasingly higher educational levels are demanded for present day employment opportunities. Greater understanding of the influencers of goals and of the problems one might encounter in choosing goals is imperative if agencies are to help develop human resources. The purpose of the present study is to determine what relationship the family has in influencing a child's educational and occupational choice.

The educational and vocational goals of rural and urban youth and of their parents for them have been surveyed in earlier studies. These studies indicated some of the differences in educational goals and vocational aspirations of youth and studied parents' preferences or corresponding goals for their young people. A comparison was also made between urban and rural youths' goals. Those persons working with youth--particularly school administrators, guidance counselors, parent educators and parents helping them make their educational and occupational goals--desire to know what young people want and where they get information so that their agencies can offer the most beneficial guidance and educational opportunities.

A former research study also indicated that there is some relationship between aspirations of youth concerning vocational goals and parental expectations. Both boys and girls in the study reported more urging to continue their education from their mothers than from their fathers. Therefore, mothers are being interviewed along with their children in the present study.

There seems to be some basis for concluding that vocational aspirations are formed at an earlier age than previously assumed, although there are conflicting opinions. Therefore, the present study is initially focusing on fifth and sixth grade pupils.

A. Detailed Purposes of the Project

1. To study the (Appalachian rural families)(Southern rural Negro families)(Southern urban Negro families).
2. To determine the relationship between selected family characteristics and occupational goals of youth.
3. To determine the relationship between selected family characteristics, the youth's goals and the goals that their mothers have for them.

4. To understand the child's academic and achievement motivation as it relates to his self-concept.
5. To determine occupational goals that young people have for themselves.
6. To determine occupational goals that mothers have for their young people.
7. After analysis of data, to determine the effectiveness of selected methods of implementing change in mothers' information and attitudes which in turn should raise the occupational aspirations of these youth.

With the aid of modern statistical methods and the field interviewers like yourself who will follow the manual instructions to gather data, the project objectives can be accomplished efficiently. We are placing our faith in you to follow our manual and interview schedule and help us reach our goals. While we are on the subject of you as an interviewer, let's discuss your general responsibilities.

B. Geographic Scope of the Study

The study is being conducted in (county and state). Several other nearby states are also conducting the same study in the same way that we are. In fact, interviewers in these other states are following an interviewer's manual just as you are doing. All of the states involved are within the Southern region of the United States. The state agricultural experiment stations and schools of home economics in the various states pooled their research skills to formulate this regional study. By allowing several states to combine their efforts, it is possible to accomplish the research objectives (presented in the first few pages of the manual) not only for each state separately but for the Southern region as well. Therefore, you are a member of a rather large team who is covering an extensive geographical territory. When we obtain our information, we will analyze it for our own state, and then it will be combined with the information gathered in the other participating states. We will then be able to compare the results of our state with those of other states.

C. General Description of the Sample

The entire state sample will include 150 youth and their mothers; that is, 300 persons in all. The particular number of mothers from whom we will be responsible for obtaining information is indicated in your packet.

The way in which we will obtain the sample families is by contacting the student first in his school and then by reaching his parents through him. But we do not go to just any school and select just any students. The project researchers will tell you about the sample. Sample students will be selected from a population characterized by the following criteria:

1. Rural Appalachian residence (urban residence)
2. Counties or areas having towns of less than 2,500 and at least 35 miles from large cities (urban from larger cities with 40,000 or more population)
3. Areas where a substantial number of people still occupy small farms rather than heavily industrialized areas or mixed-economy areas
4. Enrolled in fifth or sixth grades in the school year 1968-1969.

III. Your Part in the Study

The success of the study depends in a very large measure on you the interviewer and your efforts to make it successful. You have certain major duties summarized in the outline form below. Other details are included later.

A. To locate the homes of mothers in the families assigned to you.

An information sheet with the name, address, and directions for locating the home of each mother you are to interview will be given to you. If you have difficulty, teachers or other school personnel would probably cooperate in helping you locate homes of the interviewees on the map which we will supply.

B. To contact the mother for an appointment and enlist the cooperation of the mother of the sample family.

If the prospective interviewee has a telephone, it may be helpful to call for an appointment. Introduce yourself, specify your connection with the university, and briefly explain the purpose of the project.

> "A study is being made of how children in the fifth and sixth grades think about their future education and jobs, what they want to be when they grow up, and how much they know about different jobs. I would like to talk to you for a few minutes about how you feel about your son(daughter) John's(Mary's) future."

It will probably be helpful to refer to the questionnaire filled out earlier by her child at the school. In most cases the parents are likely to have a favorable image of the school and want to cooperate.

In case a mother cannot be contacted or an interview cannot be secured on the first trial, two or three call-backs should be made. Make inquiries from neighbors or children as to the best time or place to see the mother.

Do not invite refusals; ask to talk to the mother in such a way that assumes there is no question but that she will cooperate. It is best to get the interview on first contact if possible, but not at the expense of seriously inconveniencing her. Do not immediately accept refusals; patiently and courteously give further explanations in as persuasive a way as possible mentioning

a) the short time required,
b) the confidential nature of the information, and
c) how the study will help plan better schools and programs for young people.

C. To administer the prescribed interview schedule to the mother.

It is assumed mothers will be interviewed individually in their homes, though there is no objection to your meeting a mother in a central location if this can be more conveniently arranged for the respondent without damaging rapport. Privacy is desirable if possible, and it is highly preferable that the child about whom you are interviewing not be present.

Read aloud to the respondent all questions and responses except where otherwise instructed. Do not accept a "don't know" or an "undecided" response without first repeating the question. In the case of an open-ended question ask a general probe question to get a pertinent response.

Unless otherwise indicated, the blanks left in many of the questions mean that you are to read the child's name into the question at that point. For example, "Have you ever talked with (Sally) about the kind ?"

D. To indicate the approximate location of the sample home on your map.

Place an asterisk (*) on the approximate location of the home on your map; then identify the particular home with the identification symbol of the family or the Family Assignment Number as we call it. This number will appear on the interview schedule and the envelope containing the schedule. We need identifying symbols so that we will know which family goes with which set of papers, and too, we may wish to contact this family again in later years.

E. To record any supplementary information that you feel might be helpful in a better understanding of the situation.

After you have left the respondents home, write down any additional information or explanatory notes from your observations that you feel may be pertinent in understanding a case or interpreting results. As you administer the schedule, include any additional comments that come out for which no place is provided on the schedule. Quickly jot these in the margins. Make any detailed explanations after you have completed the interview and departed.

IV. Your Responsibilities as an Employee

Once you accept your appointment as interviewer, you are expected to conscientiously perform your duties as outlined until the completion of your assignment and not to resign except for justifiable reasons.

We have advised the county school superintendent and the school principal in your area that you will be contacting families for information or that if anyone wishes he can verify your official status.

A. Working Hours

You will need to adjust your hours to those times of day that you are most apt to find respondents available for interview. You may need to make some calls early in the morning, some in the evenings, or even on weekends, since the interview will need to be arranged around the mothers' schedules. Generally, it is not advisable to make calls after 9:00 p.m. or on Sunday, unless a respondent specifically requests an appointment for such a time. You may, if necessary, work more than 8 hours a day or 40 hours a week. However, you will be paid per interview for the interviews completed.

B. Confidential Information

Of course, you are not to communicate information obtained in interviews to any person other than your supervisors. For example, it is not a very pleasant experience for parents to be sitting in a restaurant down town and overhear a careless interviewer discussing their homelife. Although this example may seem a little far-fetched, such things have happened. The "grapevine" at times seems to approach the speed of sound, so that you must exercise complete confidentiality concerning any information given to you by respondents. Completed interviewing schedules should not be left where any unauthorized person might see them. No one other than authorized personnel should accompany you or assist you while you perform your duties.

C. Care and Stock of Materials

You are responsible for the proper care of forms and other supplies furnished by us. You are also responsible for notifying us in advance if you need extra supplies, so lack of supplies should not delay completion of your work. After you have finished your assignment, all completed interviews and surplus supplies are to be returned to our office.

V. Interviewing and Interviewing Techniques[1]

This section presents general comments concerning interviewing. It is included to give you an overview and general philosophy of the area and to help you feel comfortable as an interviewer.

A. The Interviewer's Job

Interviewing parents is an interesting experience especially for a person who really likes people. From our experience we have found that a person who really likes people can do highly effective interviewing when he has a thorough understanding of a few important facts and guiding principles. The better the interviewer knows these facts and principles, the easier the task of interviewing and the more accurate and useful the facts and figures obtained. When properly done there is real personal satisfaction in interviewing.

Each step in a sample interview survey is carefully planned to provide the most useful information at the least cost. It is what might be called a team operation. The interviewer is the most important "link in the chain" of a personal interview survey. The better he does his job, the more reliable the information obtained and the more useful it will be.

Interviewing as such has been in use ever since men began to talk to each other. A conversation carried on with a definite motive in mind can be truthfully called an interview. The shopper who questions the grocer as to the price of bananas and the doctor who talks to his patient about his illness, are both doing interviewing.

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[1] Except for slight modification in order to conform to the objectives of the present study, this section is a verbatim reproduction of portions of "Training Guide for the [illegible] Research Survey." U.S.D.A.--Agric. Marketing Service, Agric. Estimates Div.--[illegible] Statistics Branch. May 1954.

Interviews vary in purpose and in length according to the motive we have when engaging another person in conversation. It may be for the purpose of giving information, motivating or getting the individual to cooperate, or gathering facts. If we contact a person for the purpose of getting facts concerning himself and his children, our first job is that of getting him to cooperate. We must create a desire in that person to tell us about his educational and vocational plans for his teenagers. In creating this desire it will be necessary for us to give some information. People just don't "tell all" about the information we're seeking unless they first know why the information is wanted, who wants it and how it is to be used.

B. The Interviewer himself

The interviewer must school himself to be an impartial observer and recorder of facts. His job is neither that of an educator nor that of a missionary. Primarily his job is to listen, understand, and record the facts the respondent gives him in reply to the questions he asks. No matter how much the interviewer might disagree with the views of the respondent, it is not his business to try to change the respondent's way of thinking. Arguments are to be avoided at all costs. If the respondent has opinions that he wants to "get off his chest," let him talk, look sympathetic, if necessary say "Yes, I understand how you feel," and then when you get a chance, proceed with the interview. Very often the most belligerent and argumentative respondent will give the best interview once he has "unloaded his opinions" on a sympathetic listener.

The really good interviewer is honest, intelligent, patient, observant and has both initiative and ingenuity in meeting all kinds of situations. He also is aware of his own prejudices and knows how to control them. It would be foolish to assume that interviewers have no prejudices, just as it would be foolish to assume that any other group has none. All of us have such traits to some extent. The important thing is to recognize them in ourselves and to guard carefully against their entering into our work of objective observation.

Bear in mind that all selected respondents are important, regardless of personal characteristics, color, creed, or economic status. A respondent may be ignorant and you may naturally be impatient with ignorant people; he may be extremely wealthy and you may have a basic distrust for wealth; he may have Holstein cows and you like Jersey cows--nonetheless, all respondents are important, and objective understanding and tolerance must be adhered to in an interview situation.

We are now ready to consider the actual interview situation and the points that the interviewer should observe in successfully handling the interview.

C. An Interview is a Private Affair

It is not good policy to interview a person in the presence of a group such as his neighbors. Each person's privacy must be respected. If you ask questions in the presence of others, the respondent will put little faith in your statements that the information he gives will be kept confidential. He is less likely to give actual facts. Though the ideal interview situation is directly concerned with the mother, the presence of other members of her family is not to be taken as preventing an interview. It would be desirable, however, to interview the mother alone, at least not in the presence of the child in question.

D. Making Appointments

If a prospective respondent really cannot take the time for an interview when you meet her, and there are times when this is true, don't try to "squeeze" one in. It takes time for an interview. It takes time to get acquainted--to create the friendly atmosphere that is necessary for a satisfactory interview. If there is not time or this is not the appropriate time, it is best to spend a few minutes getting acquainted and then make a definite appointment for later in the day for that evening perhaps, or at a later date when you expect to be in that neighborhood or driving nearby. Once a time has been set for an interview, it is important that the interviewer *keep the appointment on time*. Being either early or late for an appointment might inconvenience the respondent and result in an unpleasant situation.

E. Putting the Respondent at Ease

The best way to put the respondent at ease is to act and feel at ease yourself. Act natural and make your own remarks conversational. If possible notice what the respondent is doing, or some interesting feature of her home, a new garage, a particular brand of grass, excellent view, an unusually large flock of chickens--something she can rightly take pride in. These are all good topics for opening conversations. We all know, of course, that the subject of weather has for years served as a useful topic for comment in getting acquainted.

The more thoroughly you know the purpose of the survey, the interview schedule and the instructions, the more sure you will be of yourself in meeting the respondent. It is impossible for the interviewer to feel at ease or to have any confidence in his work or himself unless he thoroughly knows what he is about. The interviewer must really believe in his work, and he can't believe strongly in it unless he thoroughly understands his job. Study the instructions and the background material carefully before attempting an interview. Have the primary purpose of the survey, the overall objectives, as well as the specific questions, well in mind before attempting your first interview. If this is done, you will be at ease and master of the situation. You are going to be asked questions about the survey. It is only when you can frankly answer them in a conversational manner that you can establish and maintain the atmosphere necessary for a good interview.

Most people are naturally friendly and helpful and will be willing to talk about their children. When you turn in at the gate or knock at the door, remember that *your errand is a friendly one*, that it can be as interesting to the parent as it is to you. The majority of parents enjoy visitors and will be glad to talk about their children's futures. Records of past surveys show that very few people refuse to answer survey questions. Moreover, when people are asked at the end of an interview how they feel about being interviewed, most of them express a favorable attitude and many of them ask the interviewers to come again.

Every interviewing situation should be something new and challenging. No two interview situations are ever exactly alike. Conditions are different. People are different. You contact them under different circumstances. Therefore, beware of becoming over-sold on any one method or approach in establishing a friendly relationship. A good general is always alert to changing conditions and varies his strategy accordingly in reaching his objective. So must the interviewer vary his methods in putting the prospective respondent at ease and in gaining her full cooperation.

F. Making the Introduction.

The wording of the introduction should be developed to fit the particular individuality of the interviewer and that of the respondent. It should be one that makes her feel at ease and leads directly into the interview. There are four basic points which should be kept in mind in an introduction.

1. Identify yourself by name and as a representative of (name of university) and the agricultural experiment station.
2. Explain briefly the purpose of the survey.
3. Explain briefly how the particular respondent was chosen.
4. Assure her that the information given will be held strictly confidential and will not be used to her disadvantage in any way whatsoever.

The most natural approach to an interviewing situation is the best. The most natural thing to say when you go to a family for an interview is something like this:

"How do you do, Mrs. ______________. My name is ________________. I'm working for (name of department and university) and the agricultural experiment station. We're doing a survey of the mothers of fifth and sixth grade youngsters in communities like this in (county). We're interested in finding out what your opinions and goals are for your son's (or daughter's) education and the kinds of work you hope he (or she) will follow after he (or she) leaves school. We want this information primarily because this is a problem of real concern to most youth and their parents. It will also help leaders in the schools, industries, and youth organizations who will be in a better position to tailor-make their programs and activities to fit the needs of our young people. In other words schools and youth organizations are trying to find better ways to do their jobs.

"The way we choose parents for this survey is to pick out several communities such as this one. Then we visit the fifth and sixth grades of the school, talk to the children, administer a survey form, get their address, and choose a few of them at random to call on. It's almost like putting the names in a hat, mixing them up real well, and then drawing out a certain number of them while you are blindfolded. A number of the other parents in this community are helping out also, and it's my job to call on them.

"The information you give me is confidential and will be used only in combination with information from other parents.

"I would like to ask you some questions about your family if I may. I will try to take as little of your time as possible."

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Now is the time, provided consent is indicated, to make an appointment or to administer the Mother Interview Schedule. The instructions for filling out the form occur in another section of the manual. If consent is given for an appointment, then thank the interviewee and return promptly at the time the appointment was set.

A good introduction gives the parent some idea of why this information is wanted and needed. Parts of the explanation may need to be repeated later since she may be wondering how you happened to come to her or she may be trying to size you up. She may not get everything that has been said in the introduction, and it may be necessary to make further explanations as the interview progresses. It is important, however, to give the parent as clear an explanation as possible before beginning the schedules. If she is convinced in a general way that the survey is worthwhile, she will have enough confidence to follow right through the schedule. If she is not convinced, she may spend much of the time quizzing the interviewer all through the conversation.

There are two reasons why every respondent should be told how she was chosen. First, she will be curious about it and it is a good idea to satisfy that curiosity in order that all attention can be focused on the survey questions. Second, it is important for her to realize that she is not being checked on because of taxes or anything like that. She should understand that she was chosen purely by chance. Once chosen, the report she gives becomes essential to the validity of the entire survey, as it will represent many parents of young people in the state.

It is also important for each parent to feel certain that the information asked for on the survey is confidential and will not be used to her disadvantage. The information for any one family is added to that for many other families and released as a report for the group as a whole with no individual cases pinpointed.

G. How to Meet the Parent Who Does Not Want to Cooperate

Actual refusals are rare. The experience of those people doing personal interview surveys over a period of years has been that only about one or two in a hundred families refuse to cooperate. That means that in many school communities there were no refusals. If refusals come often, usually the interviewer will find something is wrong with the way he introduces himself or explains the purpose of the survey. He should try to improve this part of his work.

For the parent who claims to be against surveys or the administration or for some other reason is antagonistic, the first thing to do is to let her "get it out of her system" and listen sympathetically, but do not argue with her. The minute the interviewer argues or contradicts anything the respondent says, the interview is lost. By the time the respondent makes a few very strong statements and the interviewer listens to her sympathetically, she begins to classify the interviewer with herself. If the interviewer still meets with a refusal, reiteration of the purpose of the survey and why it is being done may help. Comments about something in the home of particular interest which this parent obviously is doing better than average will help.

If everything fails, the interviewer should, as a representative of (name of department and university) and the agricultural experiment station depart in a friendly and courteous manner. This is the only polite thing to do.

The suggested ideas of how to meet the uncooperative parent are presented to help the interviewer to meet such situations when they arise. The uncooperative parents are few. They are human and like everyone else enjoy talking about their children and what they are doing. A little praise about something a person is doing well or takes much pride in can mean much. We all like recognition of a job well done. It's up to the interviewer to make the most out of it that he possibly can. Remember that the final results of the survey can be no better than the information the parent reports and the interviewer records on the schedule.

H. Asking the Questions

The questions should be asked as they are worded in the schedule because the same questions are being asked all over the South. It is important that the people answering them understand them the same way. It is well known that even a slight change in the wording of a question will cause a change in the answers. If an interviewer says "You don't do exchange work, do you?" he will have more people answering "no" than if he asks "Do you do any exchange work?" A deviation from the wording of the questions to the extent of suggesting the answer or putting the answer in the respondent's mouth is a major offense. Such a method of asking the questions can invalidate the survey results as much as any other technique the interviewer uses.

I. Terminating the Interview

When the interview is finished, the respondent should be thanked for help. It is important to leave a good impression. If the interview took longer than the interviewer said it would, be sure to thank the respondent for the extra time by saying "I'm sorry it took longer than I said, but you had a lot of information to give me." Mention again how it happened she was called on, or comment on the purpose and use of the survey. This may be helpful in causing her to feel that the time she has given has been very worth while. She can realize this worth much better after seeing what the survey covers and how useful it can be to have all this information from the same parent.

J. Checking the Schedule

A detailed explanation of any unusual answer should be made on the schedule. In the course of the conversation with the respondent many additional comments come out for which no place is provided on the schedule. Remember that the analyst can work with only what the interviewer turns in. Explanatory notes on the completed schedule should explain any apparent inaccuracies or inconsistencies. Such notes are extremely helpful in analyzing the results. Failure to write in such notes increases the job of reviewing and interpreting the schedules in the main office and requires a judgment decision which may be a source of possible error in the results. Under the pressure to complete a survey some interviewers may become very lax in checking over each schedule while the interview is fresh in their minds. This part of the job must not be overlooked.

K. Illiteracy

The questionnaire items will be read to the mothers. In some cases you will hand the respondent a card containing the printed items. The respondent should follow along as you read the items In the event a mother says she cannot read or you sense this situation, simply reread the item slowly and clearly in such a way that the mother understands the item but does not feel embarrassed

VI. Description of the Interview Schedule and Specific Instructions

A Cover Sheet

If the address, location or telephone number are not complete or correct as obtained from the school and the child and copied on the schedule, add information that will make future contacts easier. Describe what the house is near--local name for road or landmarks.

B. Items that the Respondent Reads

When the items below are presented to the respondent, hand her the card with that question printed on it and ask her to follow along as you read the item.

Hand a card to the respondent and read with her the following items:

5 (single card)
6 (single card)
16-28 (four cards, numbered in sequence)
29 (single card)

C. Instructions for Specific Questions

For several items it will be necessary for you to ask additional questions to illicit a response or to verify a given response.

These items are questions:

1. 1; 2a, b; 3; 4; 5; 6; 10; and 29 - Read the name of the child in the appropriate blank in these items.

2. 2a and 3 - Try hard to get a specific job in response to these questions. Do not suggest jobs but ask general probing questions or repeat the question.

3. 5 and 6 - It is important that the respondent be given the card and that the response checklist be read for both of these questions, so as to structure the response to include the trade or vocational school possibilities.

4. 7 - Asking for the name or place published is a needed check on whether the respondent is really answering for daily papers.

5. 9 - If the respondent has trouble estimating her average daily television viewing, ask the probe question provided on the questionnaire, "How many programs did you watch yesterday?" You can then figure the estimate on yesterday's viewing by adding the total time of each program If yesterday was Sunday or Saturday, it is probably best to take the last "typical" day. You need not record anything except

the check-list answer arrived at by this procedure. You may jot down the program times or names and compute the answer later.

6. 15 - Insert the name of the governor of (state and name of governor) in the blank as you read this question. Check whether or not the respondent correctly identified him.

7. 16-28 - Hand the card to the respondent and read aloud as she follows. Do not read "undecided" as a response but record it if the respondent seems truly undecided, after you have repeated the question as a probe. Unlike the schedule, the cards to hand the respondent will not have "undecided" on them.

8. 30 - This information will be used to derive a socioeconomic index score; and it should include:

   (a) The description of

      (1) both the name or general type of job, and

      (2) the specific position or what the person does, such as foreman or manager.

   (b) Whether or not the person is self-employed. Get as much detail as possible on duties and level of responsibility--not "works in Smith Factory" but "operates a sewing machine in Smith Factory," "sweeps floors and fires the furnace," "is office manager," "is shift foreman," "helps keep books," etc.

9. 32-33 - In parts c and d, the figures 25,000 (twenty-five thousand) and 2,500 (twenty-five hundred) are correct--the range in between has intentionally been excluded from analysis. Thus the person now living in a city (25,000 or more) who has previously only lived in a town of 10,000 would receive a "no" check in 32 or 33d.

10. 35 - Where one or more persons other than the respondent and her husband share the costs of the household, or buy food or pay rent, consider this "board or contributions," even if one of these persons is really the head of the household or the main breadwinner.

D. Names and Code Numbers

There is a possibility that the mother will see the code number and her name at the top of the schedule page and ask you about it. Your first answer would be something like this:

> "Oh, we use code numbers to keep us from getting your papers mixed up with those someone else fills out for us in this community. We give your records a certain number ahead of time and use it instead of your name after we have located you and you have answered the questions. This is how we keep the information you give us strictly confidential."

If the interviewee should ask further questions such as, "Yes, but you will still have a record some place of my name and what my number is; that doesn't sound confidential to me. Are you trying to fool me or something?' You would say:

> "The last thing in the world we would want to do is to be dishonest. You are absolutely right, we do have a record of which name goes with which number, but we keep that record locked up and protected at all times. We couldn't afford to let anyone see that or we'd be out of business in a hurry."

VII. Instructions for Administering the Mother Schedules

Next to the items themselves, there is nothing more important to the success of a study of this kind than the way in which the items are administered. A given schedule must be administered in exactly the same way to all persons who are to take it. If we administered the schedule to Mrs. Jones according to one set of instructions, and then used a slightly different set of instructions for Mrs. Smith, we could not place much faith in the results, and we would not be justified in comparing the two. Rephrasing a question or changing even a single word in the question you ask will often-times result in different answers. Therefore, the moral to the story of administering schedules is: Do not take the liberty of rewording printed instructions or questions; present them exactly word for word as we have provided. If it should happen as sometimes happens, and in your judgment the mistake is serious enough to have an effect on the results, finish administering the schedule. When it is completed, then make a note of the error you made describing the circumstances; attach it to the schedule; and bring it to our attention. We will decide whether or not the error was serious enough to eliminate the schedule for our analyses.

We are most sincere when we say, do not be afraid to report errors you either make or think you make. We have been interviewers ourselves and know from experience that these things sometimes occur despite all afforts to prevent them. It is neither our business nor intention to punish you for errors, but rather to help you to discover them early enough to keep them from possibly mushrooming.

Some of the information below has been presented in previous sections, but it will be included again to remind you of its importance and also to have it in step-by-step order.

A. Administration of the Mothers' Interview Schedules

1. Preparation of schedules

Before going to the interviewee's home, you are to write the child's name in the question blanks on the interview schedule. The name will appear on the envelope and on the front of the interview schedule (see III, C, page 5 of this manual).

2. Length of the Session

Only one session will be required to complete the mother's interview. Of course time will vary with different interview situations, but 40-60 minutes should be an adequate estimate.

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3. Administering the Schedule

(a) Introduce the Session

"A study is being made of how children the age of ______________ think about their future education and jobs, what they want to be when they grow up, and how much they know about different jobs. I would like to talk with you about how you feel about the future of your child and ask you some questions about the family and current issues

"A few weeks ago the fifth and sixth graders answered some questions at the school. Now we are talking with the mothers about what they want for their children

"The questions will be read aloud and you can tell me what you think. Then I will check your answers on the questionnaire."

(b) Reading Items

(1) Simply read aloud the questions and responses exactly as they are worded on the questionnaire. If the respondent does not understand an item, reread it.

(2) Read the introduction at the beginning of each section of questions to the respondent as you begin the section.

(3) Include any specific instruction for items as outlined on pages 12 and 13.

(4) Do not accept a "don t know" or an "undecided" response without first repeating the question. In the case of an open-ended question ask a general probe question to get a certain response. An example, in 2a "If you could choose any job, what kind of job would you most like ______________ to have when he grows up?" You could emphasize the phrase "If you could choose any job," and then say, "You don't have to be sure that he would get this kind of job, just think of one that you would like for him(her) to have if you could choose anything."

(c) Handing Cards to the Respondent

Items 5, 6, 16-28, and 29 are printed on individual cards for the respondent to see as you read the items aloud. Do not hand all the cards to the respondent at one time, give her only one card corresponding to the item you will read. Exceptions will be items 16-28. These thirteen items are distributed over four cards. When you come to this section, give the respondent card 1, read those items, take back card 1 and hand her card 2. Repeat the procedure until the sequence is completed.

Do not read "undecided" as a response, but record it if the respondent seems truly undecided. However, repeat the question as a probe and give the mother another chance to answer before making an "undecided" response. The cards do not have "undecided" printed on them, only the questionnaires include this category.

(d) Pacing the Presentation

Your reading pace will have to be geared to the respondent's comprehension. Try to keep the same moderate pace throughout the interview period. You can adjust to the situation allowing enough time for the mother to respond, but moving along quickly enough so as not to encourage irrelevant conversations which could become distractful and interrupt the continuity of the questionnaire.

B. Terminating the Interview

When the interview is finished, thank the respondent for her help. It is important to leave a good impression. If the interview took longer than you had anticipated, be sure to thank her for the extra time by saying "I'm sorry it took longer than I said, but you had a lot of information to give me." Perhaps you might mention again how it happened that she was called on, or comment on the purpose and use of the survey. This may be helpful in causing the mother to feel that the time she has given is very worthwhile.

Choose other comments to suit the situation and make your departure.

VIII. Records

A. Employee's Withholding Exemption Certificate

The withholding certificate with the Social Security number must be completed and filed with our office before checks can be issued. Send this in with your first work record unless you have already filed it with the university representative.

B. Interviewer's Work Record

(1) Purpose

Even though we are being paid a total amount which includes transportation for each completed interview, we would like to have a record of the time involved in collecting the data. This information will be helpful in planning future projects.

(2) Completing Interviewer's Work Record

Complete the work record as you have been directed by the project researcher. Checks will be issued according to the procedure outlined by participating university personnel.

IX. Returning Completed Interview Schedules

A suitable plan for returning completed work will be agreed upon by the interviewer and the researcher. Mailing procedures will be discussed.

APPENDIX F

RESEARCH PROCEDURES MANUAL
FOR
EXPERIMENTAL PHASE

The experimental phase research procedures manual appears in this bulletin as it was used in the research project unless otherwise specified.

RESEARCH PROCEDURES MANUAL

Experimental Phase

Most of the duties incumbent upon the project leader are those which have been discussed in technical committee meetings and of which the researcher is aware. Therefore, no need exists for exact specification of the manner in which such tasks should be performed. This manual is primarily an enumeration of responsibilities, set in chronological order of their occurrence, which will serve as a convenient reminder and checklist for the project leader.

Time Schedule for Experimental Phase

Nearly three months will be required to complete the actual experimental phase. The following outline specifies time allocations:

3 weeks	Pre-interviews and Before Test for Mothers and Children
1 week	Group Session I
1 week	Group Session II
1 week	Group Session III
3 weeks	Waiting Period After Group Sessions
3 weeks	Post-interview and After Test for Mothers and Children
12 weeks	

I. SELECTION OF EXPERIMENTAL AND CONTROL GROUPS

A. Select 25 experimental subjects. Experience has indicated that to obtain the desired number, at least 40 to 50 subjects should be initially identified as experimental.

B. Select a minimum of 10 control subjects.

C. Choose entire school units from which experimental and control groups may be drawn. Only one of the groups should be drawn from a single school to avoid contamination.

D. If the number of subjects available in a given school is sufficiently large, randomly select mother-child pairs from the unit. If the total available subjects in a particular school are approximately equal in number to the desired sample size, the entire group may constitute the sample.

II. ADMINISTRATION OF "BEFORE" TESTS.

A. Selection of Interviewer - Select someone from the community to make the initial contact with the mothers, and administer the interview schedules. No more than two interviewers should be required. The person(s) chosen for this job should be familiar with the community and the school setting.

B. Children's Survey Form - Any person qualified may be employed to administer the before test to children. In order, obtain consent of school superintendent, school principal, and classroom teachers for administration of the instrument during school hours. Advise school personnel that interviewers will also be contacting families. Be sure to establish this activity as the continuation of the project in which they have previously cooperated.

No policy has been established regarding the timing of administration of children's test relative to that of mothers. To equalize any influence of one upon the other, it is suggested that the children's test be administered on a group basis at a point approximately half way in the administration of individual tests to the mothers.

Assign the same identification number to subjects that was used in collecting baseline.

C. Mothers' Survey Form - Provide a copy of the "Interviewing Procedures Manual" to the experimental phase for each interviewer. Review interviewing procedures with the person employed. Permit interviewer to administer the questionnaire to you to insure an understanding of methods stipulated.

Prepare maps of the community showing location of the respondents' home, identification codes, names of the families, and names of the children.

Check on the results of interviewing after the first three interviews have been obtained. Verify that adequate data are being obtained.

Prepare a list of information desired from the interviewer, such as amount of working time, number of interviews, mileage driven, or telephone contacts made. Specify the time when you wish to receive data from the interviewer.

Prepare complete information for the interviewer on topics that will need to be discussed with experimental subjects:

1. Nature of the project
2. Compensation for participation
3. Location, and time of group meetings
4. Transportation provided, if any
5. Child care services provided, if any
6. Name of group leader

Prepare commitment cards to be given out by the interviewer and mailed back by the subjects. All cards should either be addressed to the researcher or the group leader. Assign responsibility for following up the contact if the card is not received.

Supply the interviewer with a flyer promoting the meetings which can be left with each subject who agrees to participate.

Specify the time schedule for conducting the interviews. All the before tests should be completed within three weeks prior to the first group meeting.

III. GROUP MEETINGS.

A. Selection of Group Leader - Select the group leader. No criteria have been established for choosing the leader. Factors such as skill in promoting group discussion and ability to demonstrate warmth and to generate trust and acceptance were considered more important than sex, age, or racial characteristics. Employ the person who seems best qualified to perform the assigned duties.

B. Meeting Place - Select the meeting place. Local considerations such as adequacy, centrality, and availability of meeting sites will dictate the selection. This scheduling should be done prior to the onset of the interviewing so that the subjects can be given information about the place of meeting at the time they receive the questionnaire. The group leader may be expected to share in the decision concerning the place of the meeting.

C. Preparation of Group Leader - Prepare the group leader. If the leader has not previously been associated with the project, a full account of the project history should be given not only to help in understanding the purpose of the meetings, but also to help in answering questions mothers may ask about the project.

Provide the leader with a manual, a copy of each lesson plan, and the illustrative materials.

Unless the group leader is a member of the research staff, you should go over each lesson plan with the leader in detail, giving appropriate explanations and suggestions.

Provide the leader with a complete list of names and addresses of all subjects in the experimental group. Also provide the names of all other persons scheduled to participate as speakers or panel members in Group Meetings I and II. Include a brief biographical history of each resource person.

Identify the person selected to serve as assistant group leader. Clarify the relationship between the leader and the assistant, specifying responsibilities of each.

D. Assistant Group Leader - Select and prepare the assistant group leader. Inform the person that duties include:

1. Arriving one hour early at each meeting to assist in preparation.
2. Introducing the women to each other and promoting informal social interaction.
3. Distributing and collecting name tags.
4. Assisting subjects in performing the interest activities.
5. Displaying illustrative material at the appropriate time.
6. Preparing (or supervising the preparation of) and serving refreshments.

7. Recording information about group interaction. This record should be set up so that it requires a minimum of notation. It is suggested that a checklist be developed on a topical basis. The assistant may then identify the number of different individuals who participate, the total number of responses from group members, and the content of responses. (See suggested record form at the end of this manual).

IV. SELECTION OF PARTICIPATING SPEAKERS

A. Speakers for Group Meeting II - Individuals chosen to share the experience leading to their achievement should preferably be from the local community. One person of each sex should be chosen. When making the selection, remember that:

1. The speaker should be well-known in the community, even if he resides outside the local area.

2. The speaker should be able to identify himself with the group. He should have a background similar to that of other participants.

3. The speaker should be respected in the community. Some people alienate others either in achieving success or in exhibiting it.

4. The speaker should be willing to contribute his time. No provisions have been made for compensating the significant persons.

5. One speaker should be a professional person; the other should have succeeded at the technical-vocational level. After the speakers have volunteered their services, carefully discuss the program format with them, or instruct the group leader to do so. Prepare a list of topics to be discussed and leave it with them as a guide for their thought preparation. Include in the list topics presented in the "Guidelines for Speakers Participating in Group Sessions." (Information Series II, page 104)

B. Speakers for Group Meeting III - Two speakers should be secured, including an industrial representative and an educational representative.

1. The industrial representative should have adequate knowledge of the local and regional job market. A person having information about a variety of job types is preferable to someone representing a single industry. Try to select someone who has had previous contact with a population on the same socioeconomic level as the subjects.

Prepare an outline suggesting topics to be covered, including:

a. An enumeration of available jobs

b. Descriptions of job activities

c. Educational requirements of jobs

d. Desirable personality characteristics for jobs

e. Forecast of labor demands in 5-10 years

f. Case histories of job successes

g. Suggestions for making and implementing job plans

2. The educational representative should have a comprehensive knowledge of local opportunities for education or job training. He should be acquainted with vocational-technical schools, community colleges, business schools, and business and industry offering on-the-job training.

   Prepare a suggested outline for the speaker, including major subjects to be discussed:

   a. Type and location of training opportunities

   b. Cost of receiving training

   c. Qualifications for admission to training programs

   d. Probable job demands in given work categories

   e. Case histories or local people who have advanced through training

   f. Ways of receiving assistance with educational costs

3. The student representative should be a recent high school graduate. Select either a male or female who graduated from high school in 1970, who is a local resident, and who is currently employed or acquiring additional training in pursuit of an identifiable career. Select one whose primary interest is self-improvement, not social betterment of the community. Seek a person who is decidedly dissatisfied with his present station in life, but who will not be condescending toward those in the group.

   Prepare an outline of subjects to be discussed in the meeting and give to the youth as a basis for preparation. Include such items as:

   a. Why did you want to do what you are doing now?

   b. How did you learn about the opportunity?

   c. When did you make the decision to try this venture?

   d. How did you go about getting into this position?

   e. How do you pay for your training?

   f. How have you handled the problems of housing, transportation, clothing?

   g. What are your plans for the future?

   h. What is really behind your success?

V. PAYMENT FOR PARTICIPANTS

Individual differences in state funds and in local conditions affecting desirability of compensating various participants make uniformity impossible. Each state may exercise its prerogative with regard to source and amount of payment. The following suggestions reflect the judgment of the committee and should be followed as closely as possible.

A. Experimental subjects should be paid; control subject should not. A written agreement should be made with experimental subjects that they be paid $10.00 for attending all sessions. Absences should be considered and payment prorated on the basis of attendance. If only one meeting is attended, $4.00 should be paid. Six dollars should be given for attendance at two meetings.

The project leader will avoid unpleasantness if conditions of payment are fully disclosed and understood prior to the meetings.

B. Interviewers should be paid approximately $5-$6 per interview. No additional expenses for travel should be paid.

C. Group leaders should be given about $15.00 per session plus ten cents per mile for travel. No additional compensation will be required if the group leader is already a member of the research staff.

D. Other participants should be sought on a volunteer basis.

VI. PUBLICITY FOR GROUP MEETINGS.

Attractive, interesting, and repeated publicity is a necessary inducement for creating interest in group session participation. Notices should be worded so that they attract attention of the mothers and provide information about the educational aspects of the program.

The first two announcements should be distributed by the interviewer at the time a commitment to participate is obtained. The first should be a postcard preaddressed to the project leader or group leader including the place, dates and titles of the three meetings, and a space for the mother's signature indicating that she will be able to attend the meetings. A suggested card description follows:

Three group meetings:

Place of Meeting

Date of Meeting - The World of Work

Date of Meeting - Roads to Opportunity

Date of Meeting - A Job for my Child

I will be able to attend the meetings.

Signed ______________________________

The second notice to be distributed by the interviewer should be a bright, attractive reminder of the place, time and the title of the first meeting. This reminder should be kept by the participant in her home. The following form is suggested:

Dear Mrs.____________________:

REMEMBER that we are looking forward to seeing you at our group meeting on (Day of the week) for

Fun
Refreshments
Information to help your child.

Time ________________ Place ______________________

Another type of notice should be timed to arrive the day before the first meeting. It could be a simple card or letter expressing the expectation that the mother will attend. The following form may be used:

Dear Mrs.____________________:

REMEMBER that we are looking forward to seeing you at our group meeting on (Day of the week) for

Fun
Refreshments
Information to help your child.

Time ________________ Place ______________________

On the day of the first meeting, all subjects who have telephones should be called. The project leader should designate the person responsible for making the calls and suggest the message to be communicated.

Suggested flyers to be mailed during the second and third weeks are included below. Each of these should be mailed to mothers in the experimental group and timed to arrive on the day preceding the respective meetings. (Flyers illustrated on next three pages).

Again on the day of each meeting, subjects having telephones should be called and reminded of the meeting. Information about the evening's program may be given as incentive for coming.

GROUP MEETING I

FOR

MOTHERS OF 7TH AND 8TH GRADERS

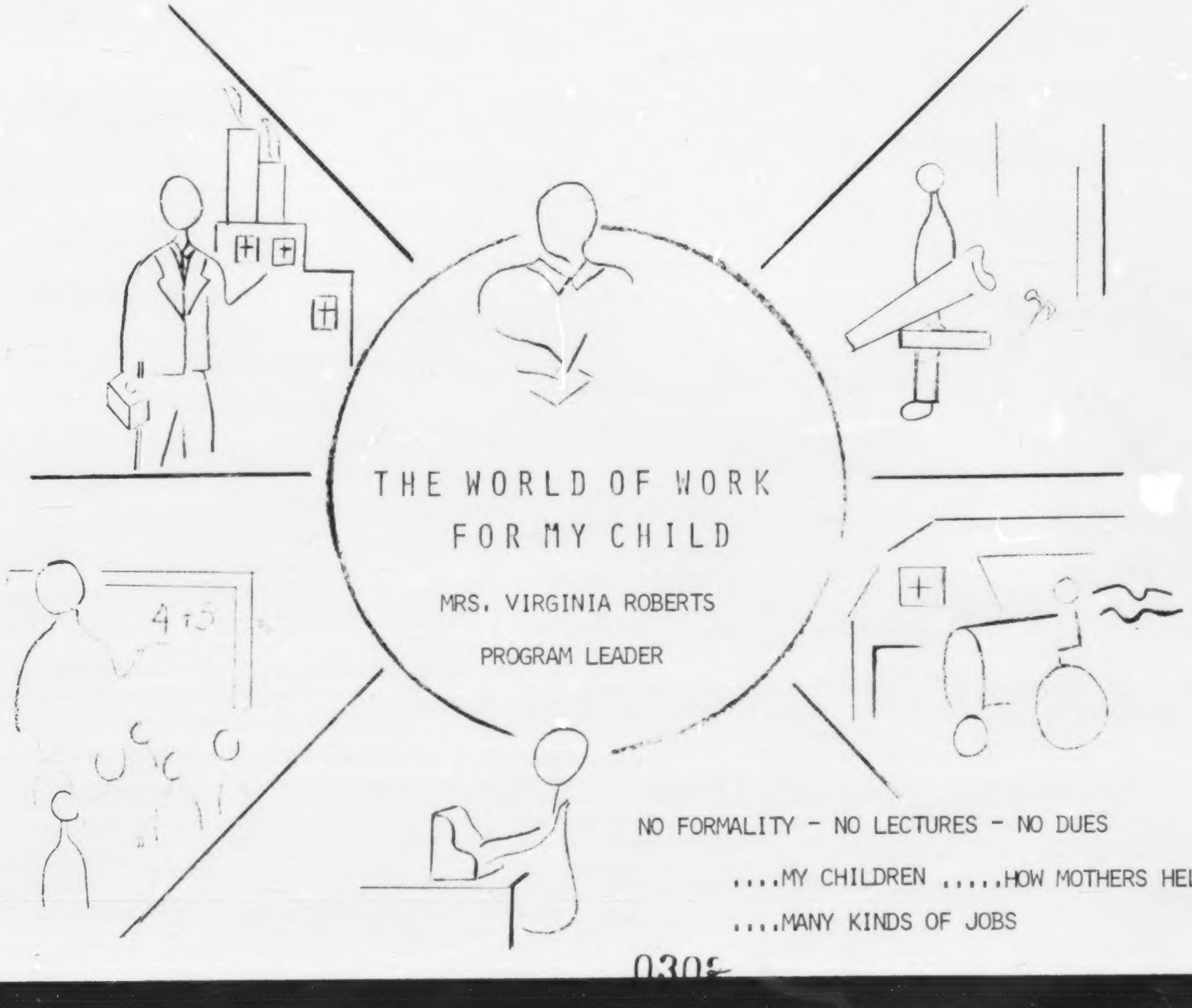
INFORMATION--FUN--FRIENDS--REFRESHMENTS

YOU ARE INVITED TO ATTEND A GROUP MEETING

Lansing School Lunch Room

Monday, March 22, 1971

7:00 - 9:00 p.m.



THE WORLD OF WORK FOR MY CHILD

MRS. VIRGINIA ROBERTS

PROGRAM LEADER

NO FORMALITY - NO LECTURES - NO DUES

....MY CHILDREN .....HOW MOTHERS HELP

....MANY KINDS OF JOBS

GROUP MEETING II

FOR

MOTHERS OF 7TH AND 8TH GRADERS

Lansing School Lunch Room

Monday, March 29, 1971
7:00 - 9:00 p.m.

ROADS TO OPPORTUNITY

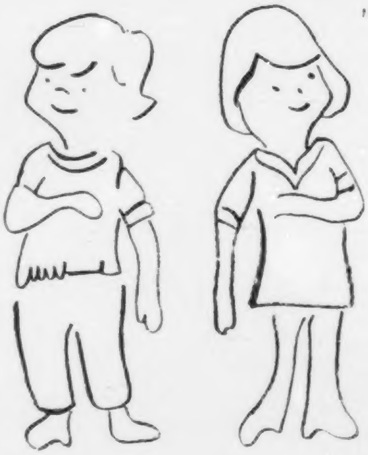
- A JOB MY CHILD WILL LIKE AND BE ABLE TO DO -

"Mr. Hope did that--"

"Mary K went to school in the next county."

"How did Bill ever finish school without someone to help him?"

"You mean I can go even if I don't have the money now!"



"Take us to tour that place."

"Will he help me?"

"Was it hard to do?"

"You mean I can be successful?"

"Alice moved to a large city."

"We could ask people who do that kind of work."

"How Can I Do That Job?"

SEE YOU AT THE MEETING!

Refreshments will be served during the meeting.

GROUP MEETING III

FOR

MOTHERS OF 7TH AND 8TH GRADERS

Lansing School Lunch Room

Monday, April 5, 1971

7:00 - 9:00 p.m.

A JOB FOR MY CHILD

JOB FACTS

JOB TRAINING

HIGH SCHOOL OR COLLEGE

GO TO JOB

HOBBIES AND CLUB WORK

JOB QUALIFICATIONS

SEE YOU AT OUR LAST MEETING!

Refreshments will be served during the meeting.

VII. TRANSPORTATION FOR GROUP PARTICIPANTS TO ATTEND GROUP MEETINGS.

Plan some type of transportation for the mothers if this is a need in your state. The use of private automobiles or school activity buses with a group plan for picking up the participants at their homes or a pre-determined location may insure their attendance. Check the liability aspects of the method(s) chosen for transportation.

VIII. ADMINISTRATION OF AFTER TEST.

The after test should be administered to the same mothers and children who were given the before test, both in experimental and control groups. It is suggested that interviews with mothers begin three weeks after the last group meeting, and be completed within a three week period. The children's tests are to be administered in a group approximately four and one-half weeks after the last meeting. This schedule should provide a fairly even distribution of children whose mothers take the after test prior to and subsequent to the time the children's test is given.

If more than two interviewers are employed to obtain data from the mothers, each person should contact the same mothers for the after test who were visited by her for the before test.

The same systems of coding and recording used for the before test may be used for the after test. Extra precaution should be taken to have the after test clearly designated as the second administration.

Remember to arrange the administration of the children's after test with school personnel at least two weeks prior to the desired time of administration. If possible, have the same individual give both tests to the children.

IX. PROVISION OF CHILD-CARE SERVICES.

A family with a large number of children, and especially with one or two older children, can usually provide child care at home with less difficulty than would be involved in taking small children to a center. If parents prefer leaving children at home--and many of the parents in these samples will-- setting up special facilities for children may actually impede participation.

If you decide to make arrangements for child care, be careful to explain that the use of them is optional. State explicitly that the children do not need to come, and that you are interested only in the mother's coming.

Since children can be distracting to parent groups, it may be an added attraction and a convenience for the mother if child-care facilities are provided. The place chosen should be far enough away that the parents cannot hear the children.

If arrangements for child care are not to be provided, it must be clearly understood that parents are not to bring their children with them.

Even though the child-care facilities are to be temporary and available only for three group meetings, the program should provide not only the care and supervision all young children need when away from their home and mother, but also a learning environment rich in things to do. The suggested activities which follow in this manual offer guides for a program based on knowledge and understanding of the fundamental needs and development of children.

X. ORGANIZING A TEMPORARY CHILD-CARE SERVICE

A detailed outline for organizing a temporary child-care service was originally included in this manual. For reporting purposes and for future reference when conducting the three programs this outline appears in Information Series II, Appendix 2, pages 181-184.

In summary the section presents ideas and directions for staffing the service with youth volunteers; providing general equipment and supplies; organizing areas in the room to include block building, reading, dramatic play and work space; greeting the children; and preparing them for going home. Specific activities for infants, toddlers, preschool, and school children were suggested. Each of the sections for different age children outlined needed equipment and supplies, what the parents should be advised to bring, and a possible schedule of activities for the evening.

XI. FOLLOW-UP CONTACTS

After all data have been obtained letters of appreciation should be written to all individuals who have participated in the program. Some letters may be written before the final test administrations, provided the addressee has no additional contact with the program after that date. The following individuals should be given a letter of thanks. Where appropriate, a letter of recognition to an individual's supervisor or employer shows even more appreciation. Letters should be written to:

A. Group leader
B. Interviewers
C. Mothers in control and experimental groups
D. Children in control and experimental groups
E. School superintendent
F. School principal
G. Classroom teachers
H. Two speakers in Session II
I. Three speakers in Session III
J. Others who have provided identifiable service.

Suggested Form for Recording Group Discussion

With 25 possible participants in a group, a single observer will be unable to keep detailed records of group activity. Therefore, a check sheet should be devised to permit a frequency count of kinds of participation by various subjects. The following form may be used:

SESSION ____

RECORD OF MEETING PARTICIPATION

	A	B	C	D	E
Group Member	Answered question by leader or others	Contributed information	Shared personal experience	Asked question	Expressed interest or concern
Name or No. 1	1				1
Name or No. 2		1		1	
etc.		11	1		

This form should be prepared in advance, with the names of all participants inserted. By assigning seats, the observer can easily identify each speaker. Begin seating assignment with Number 1 at the right of the group leader and Number 25 at the left of the leader.

As each individual speaks, the observer should make a mark in the appropriate column by the name or number of the speaker. Then, on a separate sheet of paper, a narrative entry should be made indicating the substance of the contribution.

For example:

"3B - jobs available at textile mill"

The above entry would mean that speaker 3 contributed information about the availability of jobs in a local industry.

"2D - how to prevent school drop-out"

The above entry would mean that speaker 2 asked a question regarding means of preventing children from terminating school experience before graduation.

With this information a composite picture could later be drawn revealing the total contribution of an individual to the group. The observer may use personal judgment in assigning remarks to categories and in the amount of detail to be included in written statements.

APPENDIX G

INTERVIEWING PROCEDURES MANUAL
FOR
EXPERIMENTAL PHASE

Influences on Occupational Goals of Young People
in
Three Subcultures in the South

Regional Project S-63

1971

The experimental phase interviewing procedures manual appears in this bulletin as it was used in the research project except for some sections which repeated the information already included in the baseline interviewing procedures manual. In these sections notations refer the reader to Appendix E of this publication.

Interviewer's Manual

I. Understanding This Research Project

Project S-63 is a regional research project sponsored jointly by cooperative Experiment Stations in seven southeastern states. The title of the project is "Influences on Occupational Goals of Young People in Three Subcultures in the South." The seven states participating in the program include Alabama, South Carolina, Mississippi, Virginia, Kentucky, North Carolina, and Tennessee.

The purpose of the project is to:

A. Discover relationships between selected family characteristics, such as education of the parents, and the occupational goals of rural and urban Negro and white youth.

B. Determine the effectiveness of increasing job information and changing aspirations and attitudes of mothers through parent education.

C. Determine the effectiveness of modifying job information and knowledge of educational requirements held by youth through a program that alters the mother's information and attitudes.

This is the fourth year the project has been in existence. Two years ago a great deal of information was obtained from selected mothers and their children concerning the way they felt about many important matters. Now some of these same mothers will be participating in the group meetings which you will lead. We are interested in these mothers and in their children. The children were in grades 5 and 6 when we first asked them for information about themselves and their plans. These ages were chosen because there is evidence that children may form ideas about their future jobs even this early in life. The children are now in grades 7 and 8.

We are interested in the mothers for several reasons. It is more often the mothers to whom these children turn for advice and encouragement. If the mother increases her vocational information and achieves an optimistic attitude about her child's future, she may be of more assistance to them as they plan for the work they will do later.

An increasing amount of evidence indicates, contrary to prior expectations, that the aspiration level of youth reared in poverty is sufficiently high as they relate to occupational and educational goals. In fact, such aspirations are more often than not unrealistically high. Both children and their parents who are experiencing a low level of living appear to have ample desire for upward social mobility.

The difference between what such individuals desire and what they attain is necessarily great. There appears to be a kind of hopelessness which develops among such persons, resulting in a kind of surrender before obstacles to achievements. The outcome is a severe drop-out rate in high school, a negative attitude toward continuing education, and the failure of capable individuals to achieve desirable work opportunity that is within reach.

Some of the possible explanations for the failure of lower-class youth to pursue higher career goals include (1) lack of information about the nature

p 306 blank

of local jobs, the availability of particular careers, and the educational requirements of certain work opportunities; (2) lack of information about resources for obtaining certain kinds of specialized education, particularly of the vocational and technical variety; and (3) lack of encouragement that information could be personally utilized in the practical pursuit of job goals.

The influence of mothers upon youth in the economically deprived population appears to be one of permanence and strength. If, therefore, the horizons of mothers can be heightened regarding the future of their children, it is reasonable to assume that one filtering effect upon their children will be the acquisition of greater belief in themselves and a more preferred determination to succeed in their occupational desires.

Refer to the Baseline Manual on pages ________ in this bulletin for the following sections which were the same for this Experimental Phase Manual.

II. Your Responsibilities as an Employee

A. Working Hours

B. Confidential Information

C. Care and Stock of Materials

III. Interviewing and Interviewing Techniques

A. The Interviewer's Job

B. The Interviewer Himself

C. An Interview is a Private Affair

D. Making Appointments

E. Putting the Respondent at Ease

F. How to Meet the Parent Who Does Not Want to Cooperate

IV. Administration of Interview

A. Information List

Review the name list and interview schedule supplied by the university researcher. Check the list of names and family numbers to see that you have a questionnaire for each person on your list.

B. Prepare the Questionnaire for Each Mother

Before meeting the mother, go through the questionnaire and put the names in at the appropriate blank spaces.

1. On page 1, fill in identifying information such as name, date, address, telephone number, name of child, school, grade, county, sex, and race.

2. Fill in the child's name in questions 3 through 8.

3. Fill in the child's name for question 65, in the first and last sentences of the question.

C. Indicate the Approximate Location of the Sample Home on Your Map

Place an asterisk (*) on the approximate location of the home on your map; then identify the particular home with the identification symbol of the family or the Family Assignment Number as we call it. This number will appear on the interview schedule and the envelope containing the schedule. We need identifying symbols so that we will know which family goes with which set of papers, and too, we may wish to contact this family again in later years.

D. Contact the Participants

If the mother has a telephone, you may call for an appointment. Tell her who you are, that you are working for the university, and briefly remind her of the project. You may need to help her remember the questionnaire filled out earlier by her child at school, (one in 1969 and perhaps another a few days ago) or the person who talked to her about her child's future.

E. Make the Introduction to the Questionnaire

A good introduction gives the parent some idea of why this information is wanted and needed. Parts of the explanation may need to be repeated later since she may be wondering how you happened to come to her or she may be trying to size you up. It may be hard for her to remember everything that was said in the introduction, so it may be necessary to make further explanations as the interview progresses. It is important, however, to give the parent as clear an explanation as possible before beginning the schedules. If the parent is convinced in a general way that the survey is worthwhile, she will have enough confidence to follow right through the schedule. If she is not convinced, she may spend much of the time quizzing the interviewer all through the conversation.

There are two reasons whay every mother should be told how she was chosen. First, she will be curious about it and it is a good idea to satisfy that curiosity in order that all attention can be focused on the survey questions. Second, it is important for her to realize that she is not being checked on because of taxes or anything like that. She should understand that she was chosen purely by chance. Once chosen, the report she gives becomes essential to the validity of the entire survey, as it will represent many parents of young people in the state.

It is also important for each parent to feel certain that the information asked for on the survey is confidential and will not be used to his disadvantage. The information for any one family is added to that for many other families and released as a report for the group as a whole with no individual cases pinpointed.

These are the ideas you should try to communicate before beginning the interview.

1. This is part of the same project someone talked to the respondent about in 1969. You can make the mother feel more comfortable about the situation by reminding her that she already knows something about it.

2. Tell her that she was selected by chance to be interviewed again. Some are being interviewed again, some are not.

3. Tell her that some of the mothers in the area will be going to classes to learn about jobs for the children. The questions being asked today are necessary for us to know how much help the classes give to the mothers.

4. Tell her that you will come back again in about 7 to 9 weeks to see how she feels about the questions at that time.

F. Administer the Prescribed Interview Schedule to the Mother

It is assumed mothers will be interviewed individually in their homes, though there is no objection to your meeting a mother in a central location if this can be more conveniently arranged for the respondent without damaging rapport. Privacy is desirable if possible, and it is highly preferable that the child about whom you are interviewing not be present.

Read aloud to the respondent all questions and responses except where otherwise instructed. Do not accept a "don't know" or an "undecided" response without first repeating the question. In the case of an open-ended question ask a general probe question to get a pertinent response.

Unless otherwise indicated, the blanks left in many of the questions mean that you are to read the child's name into the question at that point. For example, "have you ever talked with ___________ about the kind...?"

G. Ask the Questions

The questions should be asked as they are worded in the schedule because the same questions are being asked all over the South. It is important that the people answering them understand them the same way. It is well known that even a slight change in the wording of a question will cause a change in the answers. If an interviewer says "You don't do exchange work, do you?" he will have more people answering "no" than if he asks "Do you do any exchange work?" A deviation from the wording of the questions to the extent of suggesting the answer or putting the answer in the respondent's mouth is a major offense. Such a method of asking the questions can invalidate the survey results as much as any other technique the interviewer uses.

Read each question aloud, speaking in a clear voice and not too rapidly. Some of the mothers may not be able to read well. If a mother says she does not understand the question, or if you sense that she does not, simply reread the item slowly and clearly in such a way that she can understand without feeling embarrassed.

H. Record the Answers

As soon as the respondent gives his answer, mark the response on the questionnaire and move on to the next question. Where multiple choice answers are provided, simply put a check mark by his answer given.

A few questions, like 4a and 5, are open-ended. Try to summarize the answer given, putting the main ideas of the answer in a concise form. If necessary, jot down key words in the margin and write a more complete answer at a later time.

Begin with item 1 and proceed in order through item 65.

I. Checking the Schedule (Page 285)

J. Terminate the Interview (Page 285)

K. Inform Mother About the Group Meeting

Some of the mothers who are interviewed will also be invited to attend three group meetings. The university leader will tell you which ones should be invited, and only those should be asked to come.

Wait until you have completed the interview to seek the mother's commitment to participate.

Use the outline below to tell her about the plans.

1. What the meeting is for:

   To provide information so that mothers can help their children know more about jobs and how to get them.

2. Who will attend:

   About 25 mothers who have 7th or 8th grade children in the school.

3. When the first meeting will be held:

   Give exact date, day of the week, and time. Specify whether meetings 2 and 3 will be on the same day of the week.

4. What services will be provided:

   Specific information will be provided by the project leader about:

   (a) child care during group sessions

   (b) transportation of participants

5. What social activities are planned:

   A refreshment break will be observed in each meeting. Part of the activities in the meetings will be of a recreational and social nature.

6 What her responsibilites will be; each participant will be expected to.

(a) attend each meeting

(b) listen to the program

(c) participate in the discussion when she would like to

7. What she will receive for participation.

In some states participants will be paid; in others, a different kind of reward or incentive will be provided. The project leader will provide specific information on the amount, if any, subjects will receive, and the conditions under which the full amount will be paid.

In addition, you should stress the non-monetary benefits to be gained by participation, including knowledge which she can use to help her children.

Assume that the mother will want to come and will see this as a special opportunity. Emphasize the fun and learning which she will share with others. As soon as you have the names of others who are definitely coming from the community, tell her who they are.

After providing all the above information, reemphasize how much you want her to attend, and ask if you can count on her to be a member of the group. When the mother agrees to attend, perform the following acts.

1. Give her the card which she is to sign and mail back on the following day. Read aloud what the card says. Show her where to sign it. Point out that the card is already stamped, and all she needs to do is deposit it in a mail box.

2. Give her a flyer describing all essential information about the meetings. This will be provided by the project leader.

L. Record Any Supplementary Information That You Feel Might be Helpful in a Better Understanding of the Situation

After you have left the respondent's home, write down any additional information or explanatory notes from your observations that you feel may be pertinent in understanding a case or interpreting results. As you administer the schedule, include any additional comments that come out for which no place is provided on the schedule. Quickly jot these in the margins. Make any detailed explanations after you have completed the interview and departed.

M Return Materials to University Leader

All materials provided by the university leader for the performance of your job should be kept in an orderly fashion and returned when interviews have been completed. Some materials may be useful for research records. Others may be helpful at a later date in ways that can not be anticipated now

APPENDIX H

REGRESSION COEFFICIENTS

Table 2 A. ALL BOYS. Full Adjusted, Standardized Partial Regression Coefficients (in hundredths) Below Diagonal, and Basic Adjusted Partial Correlation Coefficients Above Diagonal and in Blocks Along Diagonal.

Block:	I		II	III		IV	V		VI				VII		VIII		IX			X			
Variable:	OCC	ED	AC	MED	MOC	SEL	FATK	MOTK	COM	PU	DM	LV	CHA	OUT	FST	IQ	ACV	ANO	FBK	HOZ	NOH	WEL	MOG
1. OCC	OCC	15*	2	9*	17*	0	-2	8*	8*	2	11*	9*	6	8*	6+	11*	13*	-11*	13*	-8*	0	-4	1
2. ED	"	ED	24*	17*	11*	11*	12*	1	8*	5	16*	18*	3	2	1	22*	14*	-11*	20*	-5	-7+	-10*	-7+
3. AC	2	26*	AC	9*	-2	32*	7+	9*	25*	5	31*	34*	-3	-1	-2	17*	6+	-7+	7+	-5	-2	0	-9*
4. MED	6	13*	10*	MED	23*	-3	1	2	0	0	-3	1	10*	0	3	18*	28*	-23*	33*	-14*	-9*	-14*	-7+
5. MOC	17*	9*	-4	"	MOC	6	1	-2	3	-6	1	4	-3	5	4	14*	20*	-15*	28*	-4	-7+	-8*	-11*
6. SEL	-1	3	31*	6	-3	SEL	16*	7+	26*	-14*	25*	42*	-1	4	-4	16*	7+	-4	7+	-5	-3	1	0
7. FATK	-4	10*	0	1	1	14*	FATK	28*	14*	4	15*	19*	-1	-2	6	5	4	-6	2	2	-27*	-10*	-5
8. MOTK	9*	-4	6+	-2	2	2	"	MOTK	17*	9*	17*	24*	0	1	7	12*	8*	-5	6+	-5	2	3	-5
9. COM	2	-4	7+	-1	1	8*	6	9*	COM	4	33*	41*	-1	9*	-2	16*	4	-3	-5	-14*	2	3	-4
10. PU	-2	2	3	3	-7+	-21*	0	7+	"	PU	36+	6	-2	6	3	-13*	-4	1	-3	5	7+	0	-6
11. DM	8+	4	13*	-6	2	11*	6	1	"	"	DM	52*	0	2	2	-3	5	-1	-2	-8*	8*	0	-8+
12. LV	2	5	7+	2	3	31*	13*	20*	"	"	"	LV	-3	0	-4	12*	10*	-2	-1	-7+	3	-2	-2
13. CHA	13*	5	-5	12*	0	3	-2	1	4	2	2	-4	CHA	-50*	0	4	12*	-1	6	-1	-1	-4	7+
14. OUT	13*	5	-5	5	4	5	-4	0	11*	7	3	-1	"	OUT	-2	0	7+	-12*	13*	2	2	1	-5
15. FST	6	0	-1	4	5	-4	8+	8*	-1	3	2	-4	0	-3	FST	-2	-10*	7+	-5	-40*	1	-7+	-26*
16. IQ	7	16*	11*	18*	14*	10*	3	11*	19*	-17*	-4	15*	4	0	"	IQ	23*	-21*	31*	-8*	-5	-10*	-2
17. ACV	3	-1	-4	14*	8+	-3	0	3	4	-3	9+	15*	17*	-3	-9+	9*	ACV	-52*	37*	-3	-6+	-18*	-14*
18. ANO	-3	0	-3	-7	-2	0	-5	-1	0	13	2	6	8+	-11*	2	-8*	"	ANO	-28*	-1	8*	4	5
19. FBK	1	7	1	23*	22*	4	1	4	-15*	1	-4	-9*	1	12*	-1	24*	"	"	FBK	-10*	-8*	-17*	-22*
20. HOZ	-2	1	0	-10*	1	-1	3	1	-18*	7	-7	-8*	1	3	-45*	-5	-2	0	-11*	HOZ	-18*	7+	-4
21. NOH	0	1	-2	-5	-3	0	-27*	0	-3	8*	7+	2	1	3	-5	-2	-1	7+	-4	"	NOH	30*	2
22. WEL	0	-4	1	-3	0	4	-1	6	5	-4	-2	-1	-1	2	-4	-2	-16*	2	-14*	"	"	WEL	0
23. MOG	6+	-1	-6+	0	-3	1	-1	0	-6	-5	-7+	-3	9*	-3	-28*	4	-12*	5	-20*	"	"	"	MOG

+ signifies a significance probability of .10 to .05 for testing hypothesis that corresponding parent coefficient is zero.

* = $p < .05$

Table 2 B. ALL GIRLS. Full Adjusted, Standardized Partial Regression Coefficients (in hundredths) Below Diagonal, and Basic Adjusted Partial Correlation Coefficients Above Diagonal and in Blocks Along Diagonal.

Block:		I		II	III		IV	V		VI				VII		VIII		IX			X			
Variable:		OCC	ED	AC	MED	MOC	SEL	FATK	MOTK	COM	PU	DM	LV	CHA	OUT	FST	IQ	ACV	ANO	FBK	HOZ	NOH	WEL	MOG
1.	OCC	OCC	17*	4	3	15*	5	10*	-3	8*	0	4	5	4	5	10*	8*	5	-2	10*	-1	4	-1	-1
2.	ED		ED	12*	19*	9*	11*	4	3	10*	-9*	5	6	-2	2	-3	15*	17*	-12*	25*	-14*	3	-7+	-9*
3.	AC	4	13*	AC	8*	5	29*	9*	5	24*	-11*	28*	34*	-3	0	0	11*	-1	4	1	3	-2	-6	-7+
4.	MED	-1	18*	6+	MED	25*	1	7+	6+	-6	-3	-6	-2	6	-3	2	12*	19*	-12*	35*	-12*	3	-13*	-12*
5.	MOC	15*	4	3	"	MOC	3	-3	-6+	1	-1	1	3	5	0	8*	20*	6	-3	10*	-4	0	-5	-4
6.	SEL	4	7+	28*	3	1	SEL	4	4	22*	-25*	26*	34*	-6	1	3	3	5	-1	0	-11*	-5	-3	0
7.	FATK	12*	1	7+	5	-1	3	FATK	30*	7+	4	8*	14*	-1	-1	1	2	-2	2	2	1	-26*	-10*	-7*
8.	MOTK	-6	1	2	4	-6	3	"	MOTK	19*	0	20*	28*	0	0	2	-6	1	2	0	-5	4	-2	-3
9.	COM	6	7+	8+	-6	1	6	3	10*	COM	-5	35*	39*	-3	0	2	20*	10*	-5	7+	-8*	-4	-3	3
10.	PU	1	-6	-5	-1	-1	-29*	6	2	"	PU	21*	-6+	5	8+	-2	-5	1	2	1	11*	-1	0	-9*
11.	DM	0	2	10*	-6	-1	19*	-2	3	"	"	DM	56*	-5	8*	-3	-3	4	0	0	4	0	7+	-2
12.	LV	-1	-5	11*	1	4	18*	14*	22*	"	"	"	LV	-7+	6	-4	5	5	-4	6	-6	-3	1	-2
13.	CHA	8+	-1	0	5	5	-3	-3	0	-3	12*	-1	-6	CHA	-47*	4	7	9*	-6	1	6	4	-1	0
14.	OUT	9*	2	-2	1	2	-1	-4	-2	-2	13*	8+	4	"	OUT	-1	3	18*	-14*	19*	-4	-6+	-1	-1
15.	FST	9*	-5	-2	1	8*	4	2	3	1	-2	-3	-4	4	-1	FST	3	-8*	3	-5	-34*	-5	-4	-26*
16.	IQ	2	11+	9*	15*	23*	1	1	-11*	25*	-7	-4	7	9+	4	"	IQ	26*	-18*	32*	-14*	-4	-11*	-7+
17.	ACV	1	4	-4	5	0	8	-2	5	7	1	6	1	11*	11*	7	13*	ACV	-54*	42*	-10*	-6+	-13*	-17*
18.	ANO	3	-2	4	2	2	4	1	5	1	5	3	-2	-1	-4	-2	-2	"	ANO	-31*	7+	7*	15*	7+
19.	FBK	8+	13*	-2	32*	5	-3	3	1	-2	1	-2	2	-6	14*	-3	23*	"	"	FBK	10*	-4	-18*	-22*
20.	HOZ	6	-9*	9*	-6	2	-6	-2	-3	-5	9*	2	-7	11*	-3	-42*	-9	-11+	8*	-12*	HOZ	-18*	-1	-5
21.	NOH	10*	4	5	8*	3	-4	-26*	7	-5	1	-3	-5	8+	-8+	-10*	-2	-2	3	2	"	NOH	39*	10*
22.	WEL	-1	0	-6+	-7*	-4	-2	0	-5	1	0	8*	4	-2	6	1	-3	-10*	12*	-16*	"	"	WEL	9*
23.	MOG	4	-4	-6+	-3	0	0	-4	-2	6	-9*	-4	-2	2	4	-29*	1	-14*	6	-20*	"	"	"	MOG

+ signifies a significance probability of .10 to .05 for testing hypothesis that corresponding parent coefficient is zero.

* = $p < .05$

Table 2 C. URBAN BLACKS. Full Adjusted Standardized Partial Regression Coefficients Off Diagonal and Partial Correlation Coefficients in Blocks on Diagonal with Data for Boys Above the Diagonal and Those for Girls Below.

Block:	I		II	III		IV	V		VI				VII		VIII		IX			X			
Variable:	OCC	ED	AC	MED	MOC	SEL	FATK	MOTK	COM	PU	DM	LV	CHA	OUT	FST	IQ	ACV	ANO	FBK	HOZ	NOH	WEL	MOG
1. OCC	OCC	17*	5	-9	12	-7	-4	12	0	13	-7	9	12	18+	-2	17+	5	-3	-4	-20*	-2	-3	2
2. ED	9	ED	32*	9	16*	21*	11	-16*	12	0	7	-14	-2	-4	5	18*	-10	-1	0	5	6	2	4
3. AC	-8	18+	AC	15+	-13*	24*	6	5	1	-13	25*	6	-9	-3	-4	17*	0	1	-11	7	3	-7	-11
4. MED	-1	-4	-5	MED	19*	2	-10	4	-8	9	-8	15	9	17*	5	20*	2	-6		-12	-10	-12+	-1
5. MOC	2	-1	-1	27*	MOC	-8	-7	6	-1	-6	-7	10	-1	2	3	26*	4	-3	10	-5	7	-6	-10
6. SEL	5	1	30*	-3	6	SEL	3	0	16*	-8	8	33*	-8	3	6	18*	-14	-7	1	1	-8	1	-4
7. FATK	5	-6	2	9	5	8	FATK	23*	3	8	17+	5	-8	-12	-1	8	-1	-7	-11	7	-22*	-9	-12
8. MOTK	19*	15+	5	3	10	9	23*	MOTK	10	7	-3	35*	6	0	14	18*	12	9	-1	3	0	13+	-7
9. COM	7	5	22*	-8	8	21*	-2	11	COM	2	33*	46*	6	21+	-5	13	-2	-2	-4	-20*	-4	1	-13+
10. PU	0	2	-13+	-4	3	-24*	6	2	-3	PU	35*	-2	10	19*	16+	-7	-1	-13	1	20*	1	0	4
11. DM	-3	2	6	12	-9	18*	-8	-16+	25*	10	DM	55*	5	7	3	4	-1	-10	1	-15+	-3	10	-8
12. LV	1	-4	5	-14	-5	0	14	36*	38*	-15*	56*	LV	-2	0	-9	18*	1	-4	2	-18*	-5	7	-7
13. CHA	4	-16+	12+	13+	-3	0	2	-1	3	12	0	-3	CHA	-48*	9	-2	8	11	5	7	-3	-4	1
14. OUT	7	-10	5	-1	-3	-4	-1	-2	6	12	6	2	-43*	OUT	-6	15+	-2	-17+	8	1	14+	3	2
15. FST	-9	-5	-6	11	8	3	-11	9	13	8	13	10	-4	15+	FST	0	6	19*	-6	-45*	-13*	-2	-16+
16. IQ	20*	12	5	17*	31*	11	0	-14+	30*	8	3	9	18*	-3	10	IQ	2	-11	29*	0	-6	-16+	11
17. ACV	2	-1	3	9	14	2	-5	20*	10	1	0	-16	-1	14	-4	16	ACV	-56*	39*	-6	-1	-21*	-12+
18. ANO	20*	-1	5	-4	8	3	-1	-5	6	3	-3	-4	-13	7	-6	-1	-55*	ANO	-23+	7	10	-3	-8
19. FBK	15+	32*	8	32*	3	2	1	-6	-4	12	-3	6	6	7	-8	1	27*	-12	FBK	0	4	-15+	-9
20. HOZ	-4	-28*	4	-11	0	-1	-8	15+	-1	20*	9	-10	4	6	-42*	-8	-12	13+	-7	HOZ	-18*	-11	-1
21. NOH	27*	6	9	4	1	-16+	-41*	-3	-19*	6	-8	-12	20*	-16+	-7	-11	-2	15+	12	-18*	NOH	43*	13+
22. WEL	-17*	-7	-6	-9	4	3	21*	19*	10	-4	13	7	-12	3	4	2	-13	1	-5	-11	43*	WEL	2
23. MOG	-3	-3	-20*	-3	3	7	-11	-4	10	-15+	7	16*	0	3	-25*	5	-13+	-3	-11	-1	13+	2	MOG

+ = $p < .10$ to .05
* = $p < .05$

Table 2 D. RURAL BLACKS. Full Adjusted Standardized Partial Regression Coefficients Off Diagonal and Partial Correlation Coefficients in Blocks on Diagonal with Data for Boys Above the Diagonal and Those for Girls Below.

Block:	I		II	III		IV	V		VI				VII		VIII		IX			X			
Variable:	OCC	ED	AC	MED	MOC	SEL	FATK	MOTK	COM	PU	DM	LV	CHA	OUT	FST	IQ	ACV	ANO	FBK	HOZ	NOH	WEL	MOG
1. OCC	OCC	16*	6	14*	15*	-5	-1	11+	-5	-10	17*	8	15*	15*	15*	6	2	-2	-2	2	0	7	10
2. ED	24*	ED	20*	6	1	-7	8	4	1	0	2	17*	7	3	8	2	12	0	4	4	-6	11+	7
3. AC	10	13+	AC	8	-3	35*	-1	3	10+	7	6	5	-3	-2	-6	-2	-2	-10	1	-6	-9	3	-7
4. MED	-7	15*	15*	MED	24*	6	4	-4	1	-2	-10	0	9	1	17*	13+	24*	-1	16*	-4	-4	2	4
5. MOC	16*	-4	4	21*	MOC	-1	0	-5	3	-4	-2	10	4	4	13*	9	20*	3	21*	9	-7	5	3
6. SEL	7	2	26*	7	3	SEL	21*	2	10	-20*	9	34*	-2	9	-6	7	-4	-1	5	2	3	7	7
7. FATK	15*	-2	-8	0	-12+	-4	FATK	26*	9	-9	0	20*	8	-4	12+	-7	-8	-8	12+	-1	-22*	-1	9
8. MOTK	-9	1	-6	7	-10	-1	24*	MOTK	1	15*	-5	18*	1	1	6	-2	2	-4	11	2	2	2	7
9. COM	10	10	9	-8	-7	-5	-8	1	COM	6	32*	37*	3	7	-2	7	4	-6	-16*	-20+	-4	7	-6
10. PU	8	-4	0	-2	-7	-25*	16*	4	0	PU	43*	15*	-5	3	-4	-20*	-3	2	-12	-11	10	-5	-8
11. DM	-6	11	30*	-6	4	31*	8	14	43*	29*	DM	48*	-6	0	3	-8	10	2	3	-8	13+	-4	5
12. LV	-6	-13	10	5	8	22*	12	25*	42*	3	64*	LV	-9	-5	1	11+	19*	13	-3	-6	3	-1	8
13. CHA	17*	7	-1	3	10	2	-3	-2	-4	7	-2	-2	CHA	-33*	0	-1	10	-3	12	-2	7	-2	23*
14. OUT	15*	5	-8	4	5	-3	-2	-4	-6	12	12	4	-41*	OUT	0	-5	-2	-2	-5	1	-14*	14*	-6
15. FST	3	-6	-4	2	5	9	-6	-16*	-9	-6	-19*	-16*	2	-3	FST	-10+	-12	-4	-1	-40*	3	-12+	-28*
16. IQ	2	14+	17*	16*	16*	12+	3	-18*	14+	-7	-8	-6	14*	-4	-11+	IQ	6	-14	19*	-2	1	7	1
17. ACV	1	3	-13	4	-11	3	3	7	11	-6	11	8	3	27*	-11	32*	ACV	-57*	37*	2	-1	-4	-11*
18. ANO	4	-8	-5	4	0	1	2	7	-1	7	9	9	-14+	-3	-4	5	-52*	ANO	-27*	-5	8	-6	10+
19. FBK	5	9	-8	34*	7	-10	-3	-3	-5	4	0	4	-1	1	0	17*	44*	-31*	FBK	-10+	-15*	-4	-29*
20. HOZ	1	1	8	2	-2	-1	7	-7	-4	1	-4	-11	18*	-4	-36*	-7	-10+	3	-9	HOZ	-21*	9	-3
21. NOH	3	-4	6	12	3	2	-23*	5	-3	2	0	-10	4	-8	-9	0	-4	3	-13+	-22*	NOH	31*	5
22. WEL	3	10	-3	1	4	-1	-3	2	6	3	0	4	1	14*	10	-8	-8	14*	-11	-8	40*	WEL	-3
23. MOG	-4	-2	-1	2	-2	1	4	-9	-1	-10	-7	-10	2	1	-30*	0	-4	1	-24*	-10+	6	18*	MOG

+ = $p < .10$ to .05
* = $p < .05$

Table 2 E. RURAL WHITES. Full Adjusted Standardized Partial Regression Coefficients Off Diagonal and Partial Correlation Coefficients in Blocks on Diagonal with Data for Boys Above the Diagonal and Those for Girls Below.

Block:	I		II	III		IV	V		VI				VII		VIII		IX			X			
Variable:	OCC	ED	AC	MED	MOC	SEL	FATK	MOTK	COM	PU	DM	LV	CHA	OUT	FST	IQ	ACV	ANO	FBK	HOZ	NOH	WEL	MOG
1. OCC	OCC	18*	3	0	19*	1	-13+	8	13+	-3	8	-6	10	8	3	3	-1	-2	9	8	-5	-2	2
2. ED	8	ED	25*	23*	9	1	11+	-3	-16*	1	7	7	8	11+	-4	20*	-3	2	6	-4	-3	-10+	-6
3. AC	3	8	AC	9	0	40*	-3	7	6	11+	12+	12+	-7	-10+	5	12*	-5	-3	9	1	4	6	1
4. MED	8	27*	6	MED	22*	3	5	-4	1	2	0	-2	12+	-1	-8	14*	9	-10+	35*	-11+	-4	0	-5
5. MOC	17*	13*	0	27*	MOC	-4	2	6	1	-5	13+	-5	-5	4	-4	15*	-2	-6	25*	-7	-10	-1	-5
6. SEL	5	15*	26*	0	-8	SEL	12*	6	0	-30*	13+	27*	10	2	-9	4	1	4	7	-8	5	4	-9
7. FATK	12*	4	20*	8	8	2	FATK	37*	6	5	4	15*	-15*	-3	6	11+	6	-3	-2	5	-37*	6	-3
8. MOTK	-9	-5	1	2	-13*	2	36*	MOTK	14*	4	7	13+	-6	-3	4	17*	-2	-8	0	1	-1	5	-2
9. COM	3	0	-11+	-3	1	5	13*	7	COM	3	36*	43*	4	8	2	25*	5	5	-16*	-11	-2	6	-4
10. PU	-6	-11	-5	0	0	-36*	0	-2	-13*	PU	30*	1	-2	-3	3	18*	0	1	15*	18*	11+	-2	-9
11. DM	8	2	9	-14*	6	14*	-9	2	31*	22*	DM	51*	5	1	3	-3	12+	10	-9	4	11+	-7	-18*
12. LV	-1	-6	21*	5	5	24*	17*	14*	38*	-12*	46*	LV	1	1	-4	13+	12	8	-15*	0	7	-5	-12+
13. CHA	0	-1	-8	1	6	-8	-7	3	-9	15*	0	-11	CHA	-60*	-6	11+	23*	8	-7	0	-2	1	2
14. OUT	5	4	-5	-3	1	-2	-8	-2	-8	14*	4	3	-52*	OUT	-1	-6	0	-8	21*	4	7	-2	-6
15. FST	24*	-6	2	-6	7	1	13*	10	0	-4	2	-3	11	-9	FST	1	-13*	-3	-1	-45*	-6	1	-35*
16. IQ	-6	9	8	8	20*	-5	-4	-4	19*	-11	-9	12+	-1	9	9+	IQ	15*	-5	25*	-12*	-1	2	3
17. ACV	0	6	-8	0	0	13+	-1	0	5	5	5	12	19*	0	-7	5	ACV	-46*	37*	-6	-3	-26*	-15*
18. ANO	-6	0	9	6	4	9	5	11	4	2	4	-6	12+	-11	2	-3	-56*	ANO	-31*	2	3	10	7
19. FBK	6	3	3	33*	5	-1	5	7	7	-1	3	-8	-12	24*	-3	40*	48*	-38*	FBK	-20*	1	-23*	-20*
20. HOZ	11+	-11+	14*	-6	8	-15*	-8	-5	-9	12+	4	-2	3	-4	-39*	-12*	-9	7	-15*	HOZ	-11+	5	-6
21. NOH	5	7	3	6	6	-5	-18*	12+	5	-3	-1	3	[illegible]	-6	-11*	2	2	-7	10	-12*	MOH	27*	8
22. WEL	5	-6	-11+	-15*	-19*	6	-6	-22*	-8	-2	14*	1	1	3	-5	0	-13+	19*	-25*	16*	37*	WEL	7
23. MOG	15*	-8	0	-9	3	-1	-6	2	8	-5	-7	-5	2	5	-31*	0	-28*	15*	-24*	-4	12*	7	MOG

+ = $p < .10$ to .05
* = $p < .05$

Table 2 F. ENTIRE SAMPLE. Schools Adjusted Partial Correlation Coefficients (in hundredths) with Girls Data Below the Diagonal and Boys Data Shown Above.

Block:	I		II	III		IV	V		VI				VII		VIII		IX			X			
Variable:	OCC	ED	AC	MED	MOC	SEL	FATK	MOTK	COM	PU	DM	LV	CHA	OUT	FST	IQ	ACV	ANO	FBK	HOZ	NOH	WEL	MOG
1. OCC	OCC	23*	9*	18*	23*	7*	2	13*	11*	0	11*	11*	8*	10*	7+	16*	14*	-11*	14*	-8*	0	-4	1
2. ED	21*	ED	35*	29*	21*	23*	18*	10*	10*	1	15*	20*	5	5	3	28*	16*	-12*	23*	-5	-7+	-10*	-7+
3. AC	9*	20*	AC	15*	5	45*	16*	20*	27*	2	30*	35*	-2	1	2	20*	8*	-8+	9*	-5	-2	0	-9*
4. MED	8*	30*	9*	MED	35*	11*	7+	5	4	-4	-2	5	12*	5	8*	30*	31*	-23*	37*	-14*	-9*	-14*	-7+
5. MOC	18*	15*	8*	29*	MOC	6	6	7+	5	-8*	2	6+	0	8*	7+	24*	22*	-16*	31*	-4	-7+	-8*	-11*
6. SEL	7+	16*	40*	4	3	SEL	22*	18*	28*	-17*	24*	23*	1	5	-2	18*	7+	-5	7+	-5	-3	1	0
7. FATK	9*	4	13*	7+	-2	9*	FATK	31*	13*	1	13*	18*	-1	-2	7+	7+	7+	-8*	5	2	-27*	-10*	-5
8. MOTK	-1	5	15*	5	-6	14*	31*	MOTK	19*	7*	17*	26*	1	2	8*	14*	8*	-5	7+	-5	2	3	-5
9 COM	9*	15*	25*	0	6+	24*	8*	18*	COM	2	33*	42*	-1	8*	5	14*	4	-3	-3	-14*	2	3	-4
10. PU	0	-10*	-10*	-2	-2	-26*	4	1	-7+	PU	36*	4	-3	6	2	-14*	-3	1	-2	5	7+	0	-6
11. DM	4	4	27*	-7+	0	25*	8*	19*	33*	23*	DM	51*	0	2	6+	-2	6	-1	0	-8*	8*	0	-7+
12. LV	5	9*	34*	1	4	35*	15*	27*	40*	-7+	55*	LV	-1	0	0	12*	10*	-2	1	-7+	3	-2	-2
13. CHA	5	-1	-2	6+	6+	-6	-3	-2	-1	6	-4	-7+	CHA	-48*	-3	6+	12*	-1	5	-1	-1	-4	7+
14. OUT	6+	8*	0	5	2	2	0	0	3	7+	8*	8*	-45*	OUT	-3	5	7+	-12*	13*	2	2	1	-5
15. FST	9*	3	0	7*	9*	7+	4	4	3	-3	-3	-1	1	0	FST	1	-3	6	7+	-40*	1	-7+	-26*
16. IQ	11*	25*	11*	25*	23*	6	3	-4	22*	-5	-3	8*	7+	11*	8*	IQ	25*	-21*	32*	-8*	-5	-10*	-2
17. ACV	5	20*	1	23*	8*	7+	1	2	10*	1	3	6	8*	18*	2	29*	ACV	-52*	41*	-3	-6+	-18*	-14*
18. ANO	-2	-14*	3	-15*	-4	-2	-1	2	-6	3	1	-5	-5	-14*	-3	-20*	-56*	ANO	-28*	-1	8*	4	5
19. FBK	10*	28*	3	39*	12*	1	4	2	7+	2	-1	6	0	19*	6	34*	45*	-33*	FBK	-10*	-8*	-17*	-22*
20. HOZ	-1	-14*	3	-12*	-4	-11*	1	-5	-8*	11*	4	-6	6	-4	-34*	-14*	-10*	7+	-10*	HOZ	-18*	7+	-4
21. NOH	4	3	-2	3	0	-5	-26*	4	-4	-1	0	3	4	-6+	-5	-4	-6+	7*	-4	-18*	NOH	30*	2
22. WEL	-1	-7+	-6	-13*	-5	-3	-10*	-1	-3	0	7+	1	-1	-1	-4	-11*	-13*	15*	-18*	-1	39*	WEL	0
23. MOG	-1	-9*	-7+	-12*	-4	0	-7*	-3	3	[illegible]	-2	-2	0	-1	-26*	-7+	-17*	7+	-22*	-5	10*	9*	MOG

+ = p < .10 to .05
* = p < .05

Table 2 G. URBAN BLACKS. Schools Adjusted Partial Correlation Coefficients (in hundredths) with Girls Data Below the Diagonal and Boys Data Shown Above.

Block:	I		II	III		IV	V		VI				VII		VIII		IX			X			
Variable:	OCC	ED	AC	MED	MOC	SEL	FATK	MOTK	COM	PU	DM	LV	CHA	OUT	FST	IO	ACV	ANO	FBK	HOZ	NOH	WEL	MOG
1. OCC	OCC	19*	8	12+	19*	6	1	19*	12	9	9	15*	3	16*	5	25*	17*	-13+	11	-18*	2	-9	3
2. ED	19*	ED	40*	20*	18*	36*	15*	2	21*	-2	14+	14+	-7	7	2	32*	-4	-5	4	-1	-5	-8	1
3. AC	4	21*	AC	17*	-4	45*	21*	23*	27*	-4	36*	40*	-11	8	-1	25*	4	-6	-1	-2	-7	-8	-10
4. MED	9	11	-2	MED	30*	15*	-3	13+	7	7	5	18*	3	19*	9	35*	23*	-19*	24*	-15*	-14*	-24*	4
5. MOC	12	7	6	32*	MOC	4	-6	13+	6	-9	-3	11	0	8	5	29*	18*	-9	22*	-11	5	-11	-8
6. SEL	0	8	41*	-7	5	SEL	16*	24*	41*	-6	33*	51*	-12	14+	4	28*	3	-11	8	-10	-10	-4	-3
7. FATK	2	-3	9	6	7	16*	FATK	24*	11	13+	21*	16*	-1	-7	1	9	5	-9	-5	8	-28*	-15*	-9
8. MOTK	16*	13+	18*	0	12	19*	24*	MOTK	28*	5	25*	41*	6	4	14+	21*	14*	-3	11	-8	2	6	-12+
9. COM	11	14+	37*	-2	20*	28*	6	20*	COM	1	36*	49*	-5	19*	3	15*	6	-7	5	-16*	1	-2	-9
10. PU	4	-2	-16*	8	5	-25*	3	-5	0	PU	33*	-4	2	14+	4	-1	5	-11	3	13+	-2	2	2
11. DM	-3	3	20*	-1	-5	23*	2	11	28*	10	DM	56*	0	7	7	5	6	-11	5	-15*	3	8	-7
12. LV	6	11	26*	-8	1	27*	10	29*	40*	-17*	55*	LV	-3	7	-2	19*	16*	-14+	12	-14+	-1	-1	-4
13. CHA	7	-5	9	21*	4	-5	-3	-3	3	8	-4	-4	CHA	-47*	7	0	4	8	4	4	-5	-7	-3
14. OUT	3	-2	2	-3	1	0	2	2	9	10	8	3	-42*	OUT	-11	18*	12	-20*	15*	0	12	4	4
15. FST	-4	8	2	15*	12	5	-3	9	17*	5	10	12	-4	12+	FST	-3	0	15*	-5	-41*	-3	-9	-16*
16. IO	19*	13+	10	22*	34*	-4	3	-5	33*	9	5	10	17*	1	12	IQ	23*	-20*	33*	-2	-14+	-24*	12
17. ACV	3	14+	8	28*	16*	1	-2	12	11	6	-1	-11	10	11	5	17*	ACV	-53*	41*	-8	-7	-22*	-10
18. ANO	15+	-6	0	-18*	-4	-3	-3	-11	-5	1	-4	0	-13+	-3	-7	-12	-55*	ANO	-22*	5	8	2	-8
19. FBK	18*	31*	6	36*	7	-6	0	-1	-2	14+	-5	0	9	-6	-2	5	28*	-11	FBK	-2	0	-13+	-8
20. HOZ	-6	-28*	2	-19*	-7	-3	1	4	-6	15*	4	-13+	0	2	-40*	-8	-10	10	-9	HOZ	-18*	8	-2
21. NOH	19*	9	-6	2	-3	-19*	-31*	-3	-16*	-2	-5	-5	11	-15*	-2	-9	-8	13+	10	-18*	NOH	36*	-9
22. WEL	-3	1	-1	-7	3	2	4	14+	1	-5	9	6	-6	-5	5	-4	-14+	6	1	-11	43*	WEL	-8
23. MOG	0	-5	-13+	-12	-2	8	-12+	-4	3	-18*	3	14+	3	-5	-24*	1	-14+	-1	-10	-1	13+	2	MOG

+ = p < .10 to .05
* = p < .05

Table 2 H. RURAL BLACKS. Schools Adjusted Partial Correlation Coefficients (in hundredths) with Girls Data Below the Diagonal and Boys Data Shown Above.

Block:	I		II	III		IV	V		VI				VII		VIII		IX			X			
Variable:	OCC	ED	AC	MED	MOC	SEL	FATK	MOTK	COM	PU	DM	LV	CHA	OUT	FST	IO	ACV	ANO	FBK	HOZ	NOH	WEL	MOG
1. OCC	OCC	26*	10	25*	24*	10	9	13*	5	-6	15*	15*	14*	8	14*	12+	14*	-10	11+	-6	2	5	6
2. ED	27*	ED	27*	16*	12+	16*	19+	13*	14*	0	15*	26*	11+	-6	4	8	18*	-12+	12+	-1	-6	7	3
3. AC	10	22*	AC	10	4	43*	15*	10	26*	5	21*	28*	-4	4	-3	7	8	-11+	7	-5	-7	4	-4
4. MED	3	24*	15*	MED	35*	9	11+	0	1	-16*	-8	1	13*	-3	15*	21*	29*	-20*	29*	-11+	-6	-3	-7
5. MOC	16*	5	12+	25*	MOC	7	6	-2	3	-14*	0	9	5	2	7	19*	27*	-17*	31*	5	-11+	0	-10
6. SEL	7	11+	42*	7	8	SEL	30*	12+	27*	-15*	20*	43*	-1	6	-6	15*	5	-4	6	0	0	7	10
7. FATK	8	-2	-3	-2	-16*	-2	FATK	27*	14*	-9	7	20*	10	-6	11+	0	4	-7	14*	-5	-22*	-11+	4
8. MOTK	-9	0	10	1	-14*	11+	26*	MOTK	6	13*	11+	17*	1	0	5	-1	6	-4	7	-4	3	0	2
9. COM	8	17*	31*	-4	-2	19*	1	17*	COM	8	31*	37*	-1	6	4	6	2	-4	-9	-15*	3	7	-2
10. PU	7	-2	1	-5	-10	-17*	18*	12+	-1	PU	43*	13*	-8	5	5	-23*	-12+	12+	-17*	-10	12+	-1	-2
11. DM	3	13*	44*	-3	-2	32*	18*	36*	42*	30*	DM	48*	-4	0	7	-7	5	1	0	-12+	13*	-2	3
12. LV	0	6	38*	4	2	36*	16*	38*	41*	5	64*	LV	-4	-5	1	11+	8	3	0	-8	6	-2	6
13. CHA	14*	10	3	5	9	-1	-1	-6	1	0	-8	-5	CHA	-34*	-4	2	10	-6	7	-5	6	-2	19*
14. OUT	8	7	-5	7	2	0	2	1	-1	8	14*	7	-36*	OUT	-2	-5	-3	-1	-3	6	-10	10	-5
15. FST	2	-9	-11+	2	8	3	-12+	-16*	-9	-4	-16*	-10	-6	-2	FST	-8	-5	4	8	-41*	7	-13*	-25*
16. IO	12+	26*	17*	25*	17*	8	1	-17*	15*	-7	-4	-1	14*	3	-7	IO	19*	-21*	24*	-2	-1	5	-7
17. ACV	6	21*	-1	23*	2	5	1	-3	11+	-6	5	5	11+	21*	-3	35*	ACV	-57*	39*	3	-4	-4	-13*
18. ANO	-3	-16*	1	-11+	-2	1	1	10	-5	7	4	3	-15*	-12+	1	-18*	-53*	ANO	-28*	-9	9	-5	12+
19. FBK	7	21*	-2	38*	9	-5	2	-7	2	0	0	5	7	8	5	31*	45	-33*	FBK	-7	-16*	-9	-30*
20. HOZ	3	2	4	-6	-6	-7	14*	-2	-3	5	2	-3	15*	-5	-30*	-10	-10	1	-3	HOZ	-21*	9	-3
21. NOH	-1	0	6	6	5	3	-26*	8	-1	2	1	-6	-2	-2	1	-6	-6	10	-17*	-22*	NOH	31*	5
22. WEL	2	3	-2	-2	3	0	-12+	6	2	4	1	0	-3	9	4	-14*	-11+	18*	-20*	-8	40*	WEL	-3
23. MOG	-2	-3	-2	-8	-4	1	1	-4	2	-7	-1	-6	-1	3	-24*	-7	-6	4	-26*	-10	6	17*	MOG

+ = p < .10 to .05
* = p < .05

Table 2 I. RURAL WHITES. Schools Adjusted Partial Correlation Coefficients (in hundredths) with Girls Data Below the Diagonal and Boys Data Shown Above.

Block:	I		II	III		IV	V		VI				VII		VIII		IX			X			
Variable:	OCC	ED	AC	MED	MOC	SEL	FATK	MOTK	COM	PU	DM	LV	CHA	OUT	FST	IQ	ACV	ANO	FBK	HOZ	NOH	WEL	MOG
1. OCC	OCC	25*	10+	14*	24*	6	-3	10+	14*	-1	9	4	7	7	3	14*	11+	-9	18*	-1	-4	-7	-5
2. ED	17*	ED	37*	44*	30*	23*	20*	12*	3	2	16*	18*	8	10	3	37*	26*	-16*	37*	-11+	-10+	-21*	-18*
3. AC	11+	18*	AC	18*	11+	50*	14*	25*	28*	3	32*	38*	6	-5	7	24*	10+	-6	15*	-9	7	3	-11+
4. MED	13*	43*	11+	MED	37*	11+	8	4	4	0	-1	1	18*	3	1	35*	38*	-30*	50*	-17*	-9	-16*	-13*
5. MOC	22*	25*	6	31*	MOC	5	12*	12*	6	-2	7	2	-5	14*	6	26*	19*	-18*	35*	-13*	-12*	-13*	-13*
6. SEL	11+	26*	38*	6	-3	SEL	19*	20*	23*	-25*	22*	39*	11+	-1	-1	17*	12*	-1	7	-10	1	0	-10+
7. FATK	14*	13*	29*	14*	6	15*	FATK	40*	15*	3	12*	19*	-10+	5	8	12*	10+	-8	4	5	-36*	-6	-12*
8. MOTK	0	6	17*	11+	-5	14*	39*	MOTK	25*	4	18*	23*	-2	2	8	20*	6	-8	6	-5	1	3	-8
9. COM	11+	13*	13*	6	9	27*	18*	17*	COM	-3	33*	44*	2	3	7	21*	4	2	-3	-12*	1	5	-2
10. PU	-8	-20*	-16*	-6	2	-37*	-7	-6	-17*	PU	31*	1	-2	3	-1	-15*	0	0	6	17*	8	0	-13+
11. DM	8	-4	18*	-15*	4	18*	1	6	26*	23*	DM	52*	5	0	5	-3	8	5	-2	4	7	-5	-19*
12. LV	10+	10+	35*	4	7	39*	17*	16*	39*	-12*	45*	LV	3	0	-1	10	9	3	-4	1	4	-4	-10+
13. CHA	-3	-7	-12*	-1	5	-12*	-5	2	-6	8	-1	-12*	CHA	-57*	-8	13*	19*	-2	3	1	-3	-4	2
14. OUT	6	13*	1	8	3	6	-2	-2	4	4	2	12*	-52*	OUT	1	3	11+	-13*	21*	1	5	-6	-10+
15. FST	20*	8	6	6	9	11+	21*	14*	4	-8	-1	-1	7	-5	FST	7	-3	0	11+	-40*	-2	-2	-31*
16. IQ	7	29*	8	26*	24*	8	6	6	23*	-10+	-7	14*	-4	21*	15*	IQ	30*	-22*	37*	-19*	-3	-10+	-5
17. ACV	6	22*	-3	21*	9	12*	4	2	9	4	3	16*	5	20*	4	30*	ACV	-48*	44*	-6	-11+	-27*	-17*
18. ANO	-8	-16*	6	-15*	-6	-4	-1	3	-7	1	2	-14*	7	-22*	-2	-26*	-58*	ANO	-32*	2	6	11+	8
19. FBK	11+	31*	5	40*	16*	10+	8	9	17*	-2	-1	10+	-8	31*	9	48*	53*	-43*	FBK	-20*	-4	-25*	-21*
20. HOZ	-3	-23*	3	-16*	0	-22*	-13*	-15*	-16*	16*	7	-4	1	-8	-36*	-22*	-10+	11+	-20*	HOZ	-11+	5	-6
21. NOH	1	4	-7	-1	-4	-4	-21*	5	5	-6	2	2	3	-3	-12*	3	-5	1	-1	-12*	NOH	27*	8
22. WEL	-3	-19*	-13*	-25*	-18*	-10+	-19*	-19*	-11+	0	13*	-1	4	-7	-16*	-13*	-15*	18*	-25*	16*	36*	WEL	7
23. MOG	3	-15*	-7	-15*	-5	-5	-12*	-1	5	-5	-8	-8	-1	-1	-29*	-12*	-28*	15*	-25*	-4	12*	7	MOG

+ = p < .10 to .05
* = p < .05

APPENDIX I

TESTS OF HOMOGENEITY OF REGRESSION COEFFICIENTS

Tests of Homogeneity of Regression Coefficients

Tests for comparing two regression coefficients may be found in standard statistics texts but tests of the homogeneity of several coefficients are not readily available. One such test which is computationally simple but not very sensitive is described below. It is based on the standardized regression coefficients and the corresponding t-statistics (that is, the ratios of the estimates to their standard errors).

Denote the standardized regression coefficients for G independent groups by b_g^* with g = 1,2...,G and their t-statistics as t_g. Compute

$$\chi^2 = \sum_{g=1}^{G} t_g^2 - [\quad (b_g^2 / b_g^*)]^2 / [\quad (t_g^2 / b_g^{*2})]$$

and refer this value of χ^2 to a table of the chi-square distribution with G-1 degrees of freedom.

Since the t-statistics, while available in the computer print-outs of the regression runs, have not been included in the tabulations of this report, the sub-culture regression coefficients which show significant differences at a probability level of .05 or less by the above test are listed in the following table. These results must be interpreted with care since they represent all significant results from a total of 233 comparisons for each sex. As with the comparison of several means in an analysis of variance, it is necessary to be conservative and the interpretation of acceptance or rejection cannot be rigid. On the average, twelve (233 x .05 = 11.6) false positives would be expected at the .05 level in 233 tests so the results listed cannot be interpreted as strong evidence of heterogeneity of the regression coefficients over the subgroups.

* * * * * * * * * * * * *

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p. 324 blank

TABLE 3

Tests of Homogeneity of Sub-culture Regression Coefficients (Significant Results Only)
Standardized Partial Regression Coefficients in Hundredths

Boys					
Variables		Regression Coefficients			
Dep.	Indep.	UB	RB	RW	X^2
OCC	HOZ	-20*	2	8	6.07*
ED	COM	12	1	-16*+	9.22*+
	LV	-14	17*	7	5.97*
	WEL	2	11+	-10+	6.75*
AC	PU	-13+	7	11+	6.90*
MED	FST	5	17*	-8	7.47*
	FBK	6	16*	35**	9.26*+
SEL	PU	-8	-20*+	-30**	6.02*
FATK	CHA	-8	8	-15*	6.16*
PU	FBK	1	-12	15*	6.22*
	HOZ	20*	-11	18*+	10.34*+
DM	MOG	-8	5	-18**	6.15*
OUT	NOH	14+	-14*	7	7.62*
ACV	WEL	-21*+	-4	-26**	6.68*

Girls					
Variables		Regression Coefficients			
Dep	Indep	UB	RB	RE	X^2
OCC	MOTK	19*	-9	-9	8.87*
	FST	-9	3	24**	10.78**
ED	MED	-4	15*	27**	8.76*
	FBK	32*+	9	3	6.88*
	HOZ	-28*+	1	-11+	9.61*+
AC	FATK	2	-8	20*+	10.66*+
	COM	22*+	9	-11+	12.32**
MOC	WEL	4	4	-19**	6.91*
FATK	FST	-11	-6	13*	6.47*
	WEL	21*+	-3	-6	6.92*
MOTK	FST	9	-16*	10	9.22*+
	WEL	19*	2	-22**	14.33**
DM	FST	13	-19**	2	8.51*
CHA	ANO	-13	-14+	12+	7.10*
IQ	ACV	16	32**	5	5.97*
	FBK	1	17*	40**	18.16**
ACV	MOG	-13+	-4	-28**	9.44*+
FBK	NOH	12	-13+	10	7.60*

Significance levels: ** .005 or less, *+ .01 to .006, * .05 to .02, + .10 to .06

APPENDIX J

PROGRAM PROCEDURES MANUAL
FOR
GROUP LEADER*

Influences on Occupational Goals of Young People
in
Three Subcultures in the South

Regional Project S-63

1971

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*This appendix includes only a brief outline and short descriptive summary sections of the manual for group leaders. The entire manual as used by leaders who conducted the experimental phase group meetings appears in Information Series II, pages 3-12. Copies are available in limited quantities from the Department of Sociology, S-205 D Agricultural Science Building, North, University of Kentucky, Lexington, Kentucky 40506, to the attention of Dr. A. Lee Coleman.

Program Procedures Manual for Group Leaders*

I. Understanding the Research Project

Sponsoring cooperative experiment stations; project purposes; duration of the project; rationale for working with mothers of young people, including a consideration of the mothers' influence upon youth in economically deprived areas; and objectives for the three group meetings along with a summary of the program plans for the three group meetings.

II. Understanding Your Duties

The duties of the group leader were detailed and presented in a format such that if desired the leader could use it for a checklist in preparing for meetings. Topics such as the following were discussed briefly: selecting and arranging the meeting room; refreshments; providing materials essential for the meeting (interest materials for the group activity, use of visual aids, informational materials and publicity flyers to be distributed among mothers, assignment sheets for participants, and using name tags.); and conducting the three group sessions.

III. Making Group Members Feel at Ease

Developing rapport among group members was stressed and tips were included on how to make the women feel wanted, appreciated and comfortable in the group situation.

IV. Conducting Lessons

General suggestions were included that were helpful to the leader as the comprehensive directions which accompanied each of the three program plans were followed. Sections included plans for becoming familiar with the total program guide (studying to learn the plans and objectives for each meeting and their interrelationship); using the leader's guide (using the suggested dialogue, making notes and underlining key words appropriate to the local area, and using a spontaneous conversational approach); keeping the meeting on schedule (importance of presenting program within alloted time and suggestions for accomplishing this); and anticipating unexpected occurrences.

V. Encouraging Group Participation

Suggestions for stimulating group participation and involving mothers in activities and discussions were presented. Specific dialogue was included to give the leaders useful ideas.

* This is not the entire manual; only brief outline and summary sections are included to give the reader an idea of manual content. For details refer to Information Series II, pages 3-12.

APPENDIX K

MOTHERS' EVALUATIONS OF GROUP MEETINGS

EVALUATION OF THE PROGRAMS

NOW, I HAVE A FEW QUESTIONS ABOUT THE MEETING YOU WENT TO AT ____________

1. I'm going to read a list of things about these meetings and get you to tell me how helpful they were to you in understanding the ideas presented in the programs. First, I'll read the whole list, then I'll go back and let you tell me whether each one was "very helpful," "somewhat helpful," or "not very helpful."

	Very Helpful	Somewhat Helpful	Not Very Helpful
a. job charts and career ladders			
b. making bottles and flowers			
c. speakers at Session II/telling about themselves			
d. speakers at Session III/telling about educational opportunities, scholarships, loans, schools, etc.			
e. speaker at Session III/telling about job opportunities			
f. young person who told about finishing school and getting a job			
g. the persons who led the group			
h. pamphlets to take home and keep			
i. materials that I could check out from the SRA kit			

2. How do you feel about the division of time between the program and the discussions?

   a. Was enough time allowed for discussion? ____ yes ____ no

   b. Would you have liked for the speakers and the leader to talk more than they did? ____ yes ____ no

   c. Would you have liked more time to talk about your children? ____ yes ____ no

3. Do you feel that there were too many meetings, not enough, or about the right number?

   ____ 2 meetings would have been enough
   ____ 3 meetings were just the right number
   ____ more than three meetings would have pleased me

4. What is the best day of the week for you to get to meetings of this type?

   ____Sunday ____Tuesday ____Thursday ____Saturday
   ____Monday ____Wednesday ____Friday

5. What do you think is the best time of the day for you to get to meetings of this type?

   ____morning ____afternoon ____night

p 330 blank

6. What would usually be the best way to let you know about meetings such as the three you attended? * most liked ways
- not good ways

____letters and announcements mailed to your home
____someone go to your house and tell you about it
____notes or announcements brought from the school
____telephone
____announcements in newspaper
____announcements on radio

7. Where do you think is the best place to hold meetings like this, for everyone to get there?

8. In general, how helpful were these meetings to you?

____very helpful ____pretty helpful ____not so helpful ____not at all helpful

9. What was the best part of the meetings? ____________________
Least helpful part? ____________________

10. What other suggestions do you have about similar meetings in the future? ____________________
____

11. Was finding transportation to the meetings a problem for you? ____yes ____no

If yes, would it have been helpful if transportation had been provided for you?

12. Was finding someone to care for your children a problem? ____yes ____no

If yes, would it have been convenient for you to have brought them to the school with you, if something had been planned for them?

13. How do you think you will use the information you have learned from the three meetings?

14. Do you feel that you have been better able to talk with your son or daughter about jobs, schooling, the future, etc., because you came to the meeting?

15. Do you think that your son or daughter would be interested in the same type of programs you attended?

16. Did you feel relaxed enough to ask the questions that you wanted to ask?

____yes ____no

If no, what could the leaders have done to help you feel that you could ask a question?

17. Would you have come to all the meetings if you had not been offered money for your participation?

APPENDIX L

COMMENTARY ON LEVELS OF OCCUPATIONAL AND EDUCATIONAL STATUS PROJECTIONS

Commentary to Chapter VI, Paper 1

Occupational and Educational Status Projections and Deflection

As mentioned in Chapter III, the NORC scores (OCC) of occupational prestige for occupations aspired-expected by the study children were about the same on the average as those aspired-expected by Wisconsin high school boys and match those attained by the 1960 U. S. population of household heads. The data in Table 4, however, indicate that a greater proportion of aspired-expected occupations of the study children fell in the professional-technical category (around 50%), from among the nine Census Bureau categories of occupations, as compared to actually attained occupations of household heads (about 17%). This suggests that, while the study children favored professional-technical occupations, they seemed to prefer the relatively lesser prestige variety of professional-technical occupation.

The data in Table 4 also reflect the extent to which prestige status aspired exceeds status expected. Actually in response to survey questions about status expected as compared to aspired there was an increase in "don't know" responses. Additionally, in both rural groups the proportion naming the professional-technical category shows considerable decline, a so-called status deflection, from aspirations to expectations. A similar pattern is shown in Table 5 for educational aspirations and expectations with perhaps an even greater amount of status deflection than for occupational aspiration-expectation. That is, the decrease in the percentage responding "finish college" was about 25 points (from about 60 to 35), while the decreases were about 10 percentage points in the response category "professional-technical."

The data do not tell directly the relative frequencies of kind of status deflection; however, it seems plausible that, for occupation named, the urban black group shifted from "operatives" to "service workers" (this was probably a female phenomenon), while the rural blacks and whites retreated from "professional-technical" into "don't know." In a more detailed view of specific occupations the data of Table 6 reflect the differing outlook on occupations as held by boys in comparison to girls. The range of occupations seems much broader when viewed by boys than for girls who rather slavishly name "teacher," "nurse," and "secretary." Status deflection is also apparent in that "doctor" and "police" give way to "farmer" and "factory work."

Although status deflection differences between aspired and expected levels are significantly different from zero, they were found to be essentially uncorrelated with other study variables. Therefore, they were largely ignored in Paper 1 and other parts of the report.

Appendix Table 4

Percentage of Study Children Naming Occupations as Aspired and Expected by Nine Census Categories of Occupations

	Aspired Job			Expected Job		
Census Category	Urban Black	Rural Black	Rural White	Urban Black	Rural Black	Rural White
1 Professional-Technical	53	60	57	50	47	40
2 Farmers	1	0	3	0	1	5
3 Managers	6	2	1	1	2	1
4 Clerical	8	4	8	8	4	7
5 Foremen	8	8	8	10	8	10
6 Operatives	17	5	8	7	4	13
7 Service	2	10	9	14	12	8
8 Farm Labor	2	1	0	3	0	0
9 Labor	1	7	2	3	12	3
Don't Know	1	4	3	4	10	13
Sample Size	353	480	579	353	480	579

Appendix Table 5

Percentage of Study Children in Three Subgroups Naming Levels of Education as Aspired and Expected

Educational Level	Aspired			Expected		
	Urban Black	Rural Black	Rural White	Urban Black	Rural Black	Rural White
Finish 8th	1	1	2	1	1	2
1-2 years High School	1	1	4	2	3	4
Trade School	1	0	0	1	1	0
High School	11	22	23	21	37	41
High School and Trade School	6	11	6	6	11	5
1-2 years College	12	5	9	16	12	12
Finish College	69	59	55	52	35	35
Sample Size	353	480	579	353	480	579

Appendix Table 6

Percentage of Study Children Naming Specific Jobs as Aspired and Expected

Boys				Girls			
Aspired Jobs	%	Expected Jobs	%	Aspired Jobs	%	Expected Jobs	%
Fire/Police	8	Athlete	8	Teacher	40	Teacher	31
Athlete	8	Farmer	7	Nurse	21	Nurse	16
Doctor	7	Factory Work	6	Secretary	10	Secretary	8
Mechanic	7	Mechanic	6	Beautician	4	Housewife	8
Teacher	6	Police	5	Factory Work	3	Factory Work	5
Truck Driver	4	Teacher	5	Maid	2	Maid	4
Race Driver	3	Doctor	4	Baby Sitter	2	Beautician	4
Farmer	3	Carpenter	4	Stewardness	1	Seamstress	1
Pilot	2	Truck Driver	4	Housewife	1	Baby Sitter	1
Factory Work	2	Race Driver	3	Doctor	1	Artist	1
Other	45	Other	40	Other	13	Other	14
Don't Know	4	Don't Know	8	Don't Know	2	Don't Know	6